THE

Horticulturist,

AND

JOURNAL OF RURAL ART AND RURAL TASTE.

Mr. Downing and the Horticulturist.

WE had barely time to announce in our last number, the sad intelligence of the death of Mr. DOWNING. We had hoped to present this month, an elaborate memoir, prepared by an intimate friend of Mr. D., but unavoidable circumstances have prevented its preparation at so early a day. It will be given in a future number, accompanied by a portrait of Mr. DOWNING.

We cannot, however, suffer the occasion to pass without paying some feeble tribute to the memory of one who was endeared to every lover of his country—to every admirer of the beautiful, and expressing our ardent appreciation of his worth.

His sudden and untimely death has fallen with a crushing weight on the hearts of his friends, and upon the public generally, as a common calamity. The place he occupied is now a blank—the commanding position to which he had carved his way, will wait long for a claimant. Though comparatively a young man, he had earned a reputation for ability, and enjoyed a popularity, which few have been fortunate enough to win. Without the advantage of a liberal education,—forced from youth to rely upon his own unaided exertions,—at the early age of thirty-seven years he had elevated himself to an enviable rank among the first minds of the age. At whatever point of view we regard him, we are compelled to admire the symmetry of his character, the vigor of his mind, the versatility of his talents, and that healthful flow of enthusiastic feeling which marks his writings. There are those who can work out beautiful thoughts in marble, who can clothe them in the touching language of poetry, or bid them flow in the rounded periods and convincing strains of oratory, but few minds seem possessed of the power to add by art to the beauty of nature, and make the desert blossom like the rose.

Mr. DOWNING first claims our attention as a practical Horticulturist and Nurserymen. Unlike the majority of working-men, he did not busy himself exclusively in the manipulations and detail of his art, though in these eminently successful,

but labored to discover the *first principles* of his profession, and to bring it up to its proper rank in the science and the fine arts. When we consider the discouraging circumstances under which he wrought, both in the means of prosecuting his work, and the apathy of public sentiment, we wonder that he should have produced a treatise so perfect in its kind, so elaborate and finished as his LANDSCAPE GARDENING. He handles with apparent ease, the subtil topics of abstract beauty, the moral and social influence of its development in nature, and what is more remarkable, he is equally at home in carrying his theory into practice. This work first appeared in 1841, and though an elegant and costly book, has now passed through four editions. It was the first publication on the subject by an American author, and so completely unknown was the art, that the manuscript remained some time in the hands of the author without a publisher. It was, however, a complete triumph, and may be said to have almost created a taste for ornamental gardening—it certainly refined and elevated it.

The discussion of a disposition and adornment of the grounds pertaining to a residence, naturally led to the subject of *Architecture*. With all the branches of this art, Mr. DOWNING was familiar, and his COTTAGE RESIDENCES and COUNTRY HOUSES, display with great effect his admirable taste. He discusses the *meaning* and *expression* of Architecture, in a profound and comprehensive manner; and following, what seems to have been a motto with him—"*Never to lose sight of good sense*,"—he shows the absurdity of adopting ancient architecture as the highest form of the art, and argues the necessity of a peculiar national style of building. That he founded a distinct school, we do not assert; but from many sources, and particularly from his own varied culture, sound judgment, and correct taste, he drew just what seemed best adapted to the wants and capacity of the country.

The Fruits and Fruit Trees of America, which was issued in 1846, presents to great advantage, the pomological research and experience of Mr. DOWNING. This work is admirably executed, and has met with universal favor. These works of Mr. DOWNING have given this country a rank among other nations in Horticulture and Rural Taste, and exerted a wide influence upon the improvement of our own gardens and houses. Many a residence, beautified by his skill, many a smiling lawn, and gracefully disposed group of foliage, remain as fit monuments to his memory, and many a home, made happier by his teachings, will be saddened by his death.

In the editorship of the HORTICULTURIST, he has shown, perhaps, better than in his other writings, the peculiar fitness of his talents to educate the popular taste for the beautiful in nature and art. The success which has attended this periodical, and the increased attention which is being paid to Landscape Gardening, Horticulture and Rural Decoration, are proof of the beneficial influence of his labors. Whether we read his Letters from England, which exhibit a refined literary taste, and a delicate appreciation of, and full acquaintance with, the pleasures of a scholarly and cultivated mind, or the plain sayings and wholesome counsel of an "Old Digger," we recognise the same sterling sense and discriminating judgment. Mr. DOWNING was not by eminence a theorist. It was not his aim to build castles too grand and lofty for human realization, or to show the power of his intellect by forming conceptions, which imagi-

nation only could give being to. The great question with him, was, how much of the really beautiful can be made subservient to the public good? how far can elegance and utility be combined? how much of the spirit of the amateur can be infused into the mass of the rural population? He has answered these questions by his deeds.

Mr. DOWNING was an American, and all his thinking and acting tended toward the welfare and elevation of his country. Very much of his deserved popularity is owing to his ability to popularise whatever he wrote upon. He seized upon what was most needed, and upon that alone, and with striking point and directness, presented it in such form, that his conclusions were irresistible.

His style of writing is unaffected and flowing, and his diction, though elegant and ornate, is never verbose or tiresome. Such a style grew naturally out of his characteristics of mind and habits of thought. His mind was furnished and cultivated, and his impulsiveness bore his thoughts by the nearest way to the desired end. This brings to notice that peculiar earnestness and sincerity which everywhere is visible in his writings. Neither a philosopher or an enthusiast, he combined the excellencies of both in his individuality. Above all others, he was the man best fitted to mould the architectural and rural taste of the country to a correct model, to guide public sentiment to whatever is highest in Nature and purest in Art, and to aid in making America what Heaven designed it should be, the garden of the whole earth.

Mr. DOWNING has closed his labors too early to have shown the full maturity of his power. If his youth has been thus productive, what results might have crowned a longer life! what beauty might have sprung from a riper experience and an enlarging capacity!

About two years since, Mr. DOWNING received an invitation to visit Washington, for the purpose of conferring with the President with reference to the laying out the public grounds in the vicinity of the Capitol. For the last year and a half he has been engaged in designing and perfecting his plans, and in accordance with them, a park of some 160 acres is being constructed. It will afford the only example of grounds to such extent, laid out by the rules of art, in this country, and will undoubtedly be a most perfect work of its kind.

In his private character, Mr. DOWNING was upright, manly, and enthusiastic, and he entered with zeal and energy into every subject which promised to elevate and refine his fellow men. In his social relations he was a *gentleman* in the best acceptation of the term. Courteous, affable, and polite to the stranger; generous, warm-hearted, and confiding to his friends, he was universally respected and loved.

The sad circumstances of his death make us less reconciled to his loss. Mr. DOWNING, in company with his wife, and her mother, sister, and younger brother, together with a lady friend, Mrs. Wadsworth, embarked on the Henry Clay, full of buoyancy and joyous expectation, on their way to Newport. Scarce two hours have passed, and that circle is broken. Some are sleeping beneath the wave,—others are weeping on the shore this wreck of hope and happiness. Mr. DOWNING, his wife's mother, Mrs. De Wint of Fishkill, and Mrs. Wadsworth, were lost—the remaining members of the party were saved,—Mrs. Downing almost miracuously. As Mr. DOWNING

was an excellent swimmer, he must have been borne down by the crowd, or perished in the attempt to save another's life.

We unite with his personal friends, and the many who are endeared to him by that charm which his writings breathed, in tendering our heartfelt sympathy to Mrs. DOWNING. We too can mourn that a great mind has been removed from our companionship,—that a noble heart has ceased to beat,—that a life rejoicing in such beauty and promise, has gone out thus early.

This sad event has thrown new duties and responsibilities upon us, which we shall endeavor faithfully to discharge. The taste for rural art which has already sprung up, the growing interest in Horticulture and Floriculture which is manifested on every hand, demand the continuance of a publication like the Horticulturist. That spirit of improvement which the well directed energies of our friend was just awakening into life, must not be suffered to die. Fortunately, the position which the Horticulturist has occupied is so well defined, and its past volumes are so replete with value, that we are not left without a guide as to our future course. We leave it for our readers to say how well the expectations held out in the very commencement of the work, have been realised; still it may not be inappropriate to refer to its general design and purpose, as expressed in the following language of Mr. DOWNING:

"In its pages, from month to month, we shall give them a collection of all that can most interest those whose feelings are firmly rooted in the soil, and its kindred avocations. The garden and the orchard; the hot-house and the conservatory; the park and the pleasure grounds; all, if we can read them rightly, shall be made to preach useful lessons in our pages. All fruitful and luxuriant grounds shall we revel in, and delight to honor. Blooming trees, and fruitful vines, we shall open our lips to praise. And if nature has been over-partial to any one part of the globe, either in good gardens, fair flowers, or good fruits,—if she has any where lavished secret vegetable treasures that our cultivators have not yet made prizes of, we promise our readers to watch closely, and to give a faithful account of them. Skilful cultivators promise to make these sheets the repository of their knowledge. Sound practice, and ingenious theory will be continually developed and illustrated. The humblest cottage garden, as well as the most extended pleasure grounds, will occupy the attention of the pens in our service. Beautiful flowers shall picture themselves in our columns, till even our sterner utilitarians shall be tempted to admire and cultivate them; and the honeyed, juicy gifts of Pomona shall be treated of till every one who reads shall discover that the most delicious products of our soil are no longer *forbidden* fruits. Whatever our own feeble efforts can achieve, whatever our more intelligent correspondents can accomplish, shall be done to render worthy this monthly record of the progress of horticulture and its kindred pursuits. If it is a laudable ambition to 'make two blades of grass grow where only one grew before,' we shall hope for the encouragement and assistance and sympathy of all those who would see our vast territory made smiling with gardens, and rich in all that makes one's country worth living and dying for.'

To carry out the intention here expressed, to so prosecute the work as to urge forward with steadiness of purpose and earnest effort, the impulses which our friend had roused to a good degree of activity, is our aim. The impetus, which, in all its branches, Horticulture has received, has made the demand for more ample information in the details of its successful prosecution, commensurate with its importance. That which, five years ago, would have been needlessly obtrusive, has now become a necessity, such has been the progress in the art of gardening. An increased attention to detail in the practical manipulations of the flower and kitchen garden, is called for, and may, we think, be combined with the more artistic and scientific branches of rural taste.

We are well aware that we shall labor under disadvantages—that he who was the

master spirit in this art, is no more; but may we not hope that echoes of his genius will come back to us from the smiling gardens and beauteous landscapes which his taste has rendered so expressive—that some other mind will kindle with the ambition "to make his country worth living and dying for," and that the work which has been so auspiciously commenced, will not cease for lack of laborers.

For the present, we shall continue THE HORTICULTURIST under our own immediate direction, but hope, before the close of the current volume, to secure the services of a competent Editor, who will efficiently carry out the spirit and design of the work. In the meantime we earnestly invite the continued correspondence and assistance of those who have hitherto contributed to its pages, and such rough notes of experience as practical gardeners, nurserymen, and cultivators generally, may see fit to favor us with.

It is impossible to enter with too much zeal and enthusiasm, into this work. We cannot, with safety, appropriate the result of horticultural labors in other countries. Our tastes and wants are peculiarly our own, and must be fostered and satisfied with American talent and research. Knowledge in the abstract may satisfy the German mind; the desire of supremacy may stimulate English energy; the vain-glorious pride of excelling in rare and beautiful products, may induce the Frenchman to exertion, but different motives urge us, as American citizens, to beautify our country, and increase its cultivation. We want the ornamental and useful together,—we require facts as well as theories,—we build houses to live in as well as for effect—we cultivate gardens for profit, as well as beauty. There is, then, a broad field for the student of Horticulture, and a widening sphere for the taste of the amateur. If he "who makes two blades of grass grow where one grew before," deserves well of his country, how rich will be the reward of him who brings forth the treasures of science to adorn the earth and refine the mind.

THE PLEASURES OF GARDENING.

BY WM. W. VALK, M. D., FLUSHING.

WE are disposed to cull a flower from every field of the literature of gardening. Therefore, we pluck this from a rich soil, and offer it to the readers of the Horticulturist, for their admiration or criticism.

Perhaps not one among the many thousands of every class who read for amusement or for profit, but will admit that gardening has its *peculiar* pleasures. It is, indeed, an absorbing recreation, and among its votaries has ranked illustrious princes and renowned philosophers. The most eminent and worthy of mankind, whether occupying exalted positions in public life, or fulfilling the more retired and unobtrusive duties of a private sphere, have ever made it their favorite amusement. It is an enjoyment and occupation for which none can be too high or too low—at once the pleasure of the greatest, or the care of the meanest. The interest which flowers have excited in the breast of man, has, from the earliest ages to the present time, never been restrained to any particular class of society, or quarter of the globe. Over the whole world, nature seems to have distributed them as precious medicaments, to both the mind and body—to furnish agreeable sensations to its inhabitants, and to impart cheerfulness and beauty to the earth. In the joy

of his heart, the untutored savage binds his brow with the native flowers of his romantic haunts, while in every country, in proportion as civilization and refinement advances, so does a taste for their cultivation increase. It is for the love of a garden, that the most powerful influence is exerted in attracting men to their homes, and for this very reason, every possible encouragement that is given to promote a taste for ornamental gardening, secures an additional guarantee for domestic felicity, and the unity, morality, and happiness of the social circle. Nor must it be forgotten, that as a recreation it conduces materially to health, advances intellectual improvement, softens the manners, and subdues the tempers of men.

Of all embellishments, flowers are the most beautiful, and man alone, of all the sentient tribes, seems capable of deriving enjoyment from them. With infancy the love for them commences; throughout the period of adolescence and youth, it continues unabated, increasing with our years, and becoming a great and fertile source of comfort and gratification in our declining days. No sooner does the infant walk, than its first employment is to put a flower in the earth, and to remove it ten times a day, to wherever the sun shines most favorably. In the care of his little plot of ground, the schoolboy is joyously relieved from his studies, and loses all the anxious cares and thoughts of his tasks, or the home he may have left. In manhood, our attention is generally occupied with more active duties, or, by more imperious, and may be, less innocent pursuits; still a few hours employment in the garden, affords a delightful recreation, and as age compels us to withdraw from the busy cares of life, the attachment to flowers, and the delights of gardening, come to soothe the later periods of our existence.

In the growth of flowers, from the first tender shoots putting forth from the earth, through all the changes which they undergo, to the period of their utmost beauty, man will do well to behold and contemplate the wonderful process of creative wisdom and power. What *can* be more interesting than to watch Nature in all her progressive stages, from the planting of the seed to the maturity of the perfect flower? and who, upon observing the perfect order which prevails throughout her whole varied and extensive territory, and gazing on the delicate texture, admirable structure, and fairy pencillings of such a flower as the *Phaius albus*, but will exclaim, that

> Nature is but a name for an effect
> Whose cause is God. Not a flower
> But shows some touch, in freckle, streak, or stain,
> Of his unrivall'd pencil. He inspires
> Their odors, and imparts their hues,
> And bathes their eyes with nectar, and includes
> In grains as countless as the sea-side sands,
> The forms with which he sprinkles all the earth.
> Happy who walks with him! whom, what he finds
> Of flavor, or of scent, in fruit or flower,
> Or what he views of beautiful or grand
> In nature, from the broad majestic oak
> To the green blade that twinkles in the sun,
> Prompts with remembrance of a *present God!*

We view the bud as it swells, look into the expanded blossom, and delight in its rich tints and fragrant odors; but more than all, how great the charm in contemplating the precise conformation and mutual adaptation of its organs, and the undeviating regularity with which their various metamorphoses are effected; before which, all the combined in-

genuity of man dwindles into nothingness. For, while the simple cultivation and magement of flowers is productive of much innocent pleasnre, how immensely is that pleasure enhanced, when science is secured as its auxiliary! The cultivator of flowers or fruit, on whom the light of science has just dawned, feels like one emerging into a new sphere of existence. A multitude of subjects, previously unheeded, present themselves to his consideration, which, as he proceeds to contemplate them, diverge into a successive series of interesting associations, and awaken in his mind emotions of pleasure and gratification, of which he had been hitherto unconscious. Instead of being content to follow blindly the ordinary routine of the management example has prescribed, he perceives that certain plants require a peculiar mode of treatment, and is lead to inquire *why* that treatment is necessary. In prosecuting this investigation, other and more intricate subjects present themselves to his mind; thus inquiry begets inquiry, and one thought gives birth to another, until, in the solution of them, he makes the discovery, that all nature is governed by universal and unerring laws, that the annual changes to which plants are subjected are intended to answer specific and important ends, and that the whole chain of gradation in organized matter, is linked together in the most perfect harmony and order. This knowledge attained, he suffers not the most trifling of nature's phenomena to escape his notice. The development of a leaf on the most familiar tree, offers a field for his observation, for he learns that it is destined to bring forth, nourish, and mature a germ, which is capable of producing a distinct tree, that in process of time would equal or exceed in size, the parent that forced it into existence. He observes the autumn leaves in their fall and decay without regret, because they have duly performed their important functions, and knowing, that were they capable of remaining, they would probably excite the young buds into premature action, and cause them to fall a prey to the inclemency of the approaching season.

These are *some* of the delights which science affords, but they are not all, for it is likewise capable of imparting an interest to the most common operations of the garden. Why does the pupil of science scatter his seeds in the ground, and cover them with the soil? Because he knows that they must be thus enveloped, and excluded from the light, in order that the various genial gaseous elements involved in such a situation, may stimulate into action the vegetable vital principle; he knows too, that the soil must be spread over them very lightly, because a proximity to the atmosphere is alike essential to their germination. He watches the young seed lobes as they appear through the ground, and in imagination perceives the little rootlet issuing simultaneously from the newly excited embryo; soon the first leaves are formed, and calculating correctly on a similar extension and ramification of the root, the earliest opportunity is made available, to transplant it to its desired destination. This operation he either defers till dull and cloudy weather, or affords his plants an artificial shading from the sun. This shading they require, for all the delicate seedlings need time gradually to accommodate themselves to their new position. Were they *not* screened from the sun's rays, evaporation would become profuse, and the plant die, before it could absorb sufficient liquid nutriment, to counteract it.

But after all, it is needless for us to expatiate on such a subject, for the pleasures of gardening are not derivable from elaborate treatises, nor very easily communicable. To be properly appreciated, they must be diligently sought after, and when once tasted, the mind will rarely become satiated, but will rove as the bee, from flower to flower, in search of nutritive and delicious sweets, extracting from each successive object, fresh stores of wisdom and delight, till at length it succeeds in amassing that which most truly constitutes the wealth of man—a fund of knowledge of the great Creator's works.

Flushing, Aug. 12, 1832. WM. W. VALE.

ENTRANCES TO COUNTRY SEATS AND VILLA RESIDENCES.

[SEE FRONTISPIECE.]

Every traveller through England must have been struck by the effect produced upon its rural scenery, not only by the entrances to the more extensive parks of the nobility, but also by the numerous gateways and lodges which are found to almost every country house, and to the small pleasure grounds even of the suburban villas. Few, if any, appendages to a residence, which has only a limited extent of ground surrounding it, add so much elegance to its general appearance, or importance to its character, as does an entrance suitable to its position and extent. We say *suitable*, because much as the stately entrance arch, and its accompanying lodge, gives dignity to the mansion of the millionaire, a far less structure satisfies the requirements of the villa.

Whatever may be the beauty of pleasure grounds or the magnificence of the park, however diversified the ground, or varied the scenery of the landscape, unless the attention be arrested by a judicious entrance way, half the effect which the whole is calculated to produce, is lost. On the contrary, when upon drawing near a country seat, the eye is gratified by the elegance of the entrance gateway, proportioned to extent, and appropriate in structure to the principal edifice, an indication of refinement is conveyed to the mind, and we prepare ourselves, imperceptibly, to admire the beauties and embellishments which we expect to follow the fitness of the approach.

Take a few acres of our native wilds, where the undulation of surface admits readily of the production of diversified effect; cut down a few trees, leaving a group here, and there a noble denisen of the forest, to challenge the attention of the observer; then surround your domain with a fence, and place a good entrance gateway to the whole, and you have converted in a few hours, a wilderness into a garden, and taught the savage a lesson of civilization!

We have been gratified to see that this truth appears daily to become more and more noted around us. In the vicinity of New-York, and other parts of the country, we have observed many an edifice of the nature alluded to springing up, and with the view to foster so desirable and well directed a taste, we have presented our readers with an engraving in the present number, taken from an entrance gateway which has long been in high esteem with the landscape gardeners of England.

This arch is one which is adapted to grounds of considerable extent, and the mansion to which it belongs bears an architectural character in accordance with its general features.

It must be borne in mind, that the style of architecture of the principal edifice, and its size, must form the guide upon which the fitness of the entrance is determined upon. Nor is the position of less importance than the style. Whether it be a simple gate, an arch, or lodge, or a combination of more than one of these, the position of it should rarely, if ever, be parallel to the road of approach. A greater or less angle, the exact proportion of which should be regulated by the general features of the ground, will set off to much more advantage the pretension of the entrance, than will be practicable if it is erected on a line with the road. It should always be placed a few feet, and often some yards from the side of the road, and, if possible, in the immediate vicinity of a few trees, whose age and grateful shade, may add both dignity and beauty to the new erection.

PLUMS AT THE SOUTH.

BY WM. N. WHITE, ATHENS, GA.

A. J. Downing, Esq.—As the plum has ripened this year some three weeks earlier than usual, and the season is nearly over for taking notes upon it, we propose to continue our notices of southern fruit growing, by some remarks upon its culture, and notices of the varieties tested in this section.

This immediate vicinity is, perhaps, upon the whole, tolerably favorable to the plum. The Chickasaw Plum is found abundantly in every old field, and there is no very serious obstacle to the growth and culture of the improved species. We do not mean that the plum may be abused as the peach is—that you can plant a stone or a tree at random in an "old field," or in a patch of Bermuda grass, and in two or three years therefrom gather an abundant crop—and in case the seed be of a choice fruit, very likely find your seedling of good quality—for such management will not do for the plum, unless it may be the native species. But though the plum requires some care and attention, there are few locations where it does not require as much, or where in the case of a few select varieties, the reward is more sure.

Our chief advantage is a complete exemption from the black knot, which in some parts of the north I have observed, is apparently as fatal to the plum, as the frost or fire-blight to the pear. This disease has never appeared here. In general, our trees appear perfectly healthy, and make a fine vigorous growth yearly.

We are, also, partially exempt from the curculio. He seems to confine his attention very much to Apricots and Nectarines—usually taking the whole crop of these fruits—but of plums, generally leaving enough of the crop not to render it unprofitable, without resorting to shaking the tree, or calling in the aid of fowls or pigs. Our stiff subsoil of clay and gravel, is too difficult to penetrate, perhaps, while the light gravelly loam that often overlies, is, in general, too shallow to give him a quite comfortable protection from sun and frost. But we by no means entirely escape.

In 1849, a frost in April destroyed all our Apricots, Plums, Peaches and Nectarines; and we were congratulating ourselves that the next year we should be free from curculio. As the destruction of fruit was complete, by all theory the curculio should have perished too. Will you believe it, when we state the obstinate imp utterly refused to sacrifice himself, to maintain even this most plausible of theories. It was absolutely certain, we thought, that die he must, yet he did'nt, and in fact, destroyed more fruit, if anything, than usual; so that if poultry and pigs are any protection, as they undoubtedly are, it must be by frightening him away, or rendering his haunts uncomfortable, rather than by any positive destruction to the curculio himself.

But, though exempt from the black knot, and partially so from curculio, we are not without some little troubles of our own. Occasionally a tree, or a part of it, dies in the same way as the apple, by the sun striking the trunk or branches. The plum is apt to throw out long branches, not much protected by foliage, which are sometimes blistered by exposure, causing the parts above to perish gradually, and if not removed, injuring the general health of the tree. This is not a very frequent disease, and shortening-in the branches, as directed for the peach, will doubtless so clothe the limbs with foliage, as to prove an efficient preventive.

We find another difficulty in the want of adaptation of a good many plums that are

celebrated with you to this climate. You will observe that several classed in your work as best, here bear no comparison in flavor with some others regarded with you as not of the highest quality. We buy new varieties with the probability that at least every other one of those classed among the best, will be good for nothing. Still we know of several kinds of high flavor, and the rest we can let alone now we have the experience desired.

But our greatest obstacle in the culture of the plum, is its tendency, in common with several varieties of the peach, nectarine, and grape, to rot before maturing. In a dry season, no matter how hot it may be, the fruit is not in much danger. But in a year like this of warm, abundant and continual rain, the cultivator may expect to lose, in the case of most varieties, from half to three-fourths of his crop, and of some it may be the whole will decay. He can guard against this only by selecting the varieties least affected.

A good stock for the plum is the Prunus chicasa or wild Chickasaw plum of the country, which I believe is common over all the south, and collar or root grafting on the same is our usual mode of propagation. It sometimes throws up suckers, but they are easily removed, and it is uniformly hardy and healthy, and as the grafts take kindly, it is perhaps the best. It is a good stock for the garden for it dwarfs the tree, and, as in the case of the pear on the quince, the point of junction should be beneath the surface. The wild sloe, a small austere red plum, fit only for preserving, is sometimes used, but the grafts are sure to over grow it and perish for want of nourishment.

It is proper to state, before proceeding to notices of varieties, that the times of ripening below are for 1852, and will average two or three weeks earlier than usual, as I find by comparing the times of the few set down last year. The abundant rains too this year, may have so injured the flavor of some varieties, that full justice may not be done them. They are described in the order of ripening, and the dates given are when they begin to mature.

1. Chickasaw Plum.—Prunus chicasa—A tree or two of this plum should find a place in every garden, of both the red and yellow varieties. The fruit is much enlarged by garden culture—but the best varieties are later than the common ones—leaves lanceolate shape, more like the peach than a plum—branches thorny. Fruit small, (size of Mirabelle in your Fruits, or a little larger,) skin either bright red or yellow, somewhat translucent,—flesh yellow, very juicy and sweet, but somewhat astringent about the stone, to which it adheres. Ripe the 20th of May, and lasts nearly a month. From this will doubtless be produced many excellent varieties by culture and crossing. I have met one variety nearly a month later, marked with small yellowish dots, fruit almost the size of Prince's Yellow Gage, and nearly free from astringency. Can species of fruit trees as nearly related as this and the domestic plum, be crossed with each other Mr. Editor, with any prospect of producing improved varieties? This plum is I believe free from curculio; perhaps the fruit sets too early in the spring for him. It never fails of a crop with us.

2. Sea or Early Purple?—Ripens the 8th of June, and is with us the earliest of cultivated plums. Fruit—small roundish; skin—brownish purple, (color of the Columbia,) with a scanty light colored bloom. Flesh—greenish yellow, sweet, juicy, and parts freely from the stone; highly perfumed. This nice little plum was, I believe, first introduced here by some grafts received from Germany. Has now borne some three years. Maturing so early, it is one of the most valuable. I do not find any description in the books with which it coincides. It does not rot.

3. Wilde's.—Fruit—size of Imperial Gage, oval oblong; skin, rather thick, yellow or greenish yellow, with a white bloom. Flesh—yellowish green, pretty firm, dry, sweet, and adheres to the stone. Tree a good bearer. In 1848 we considered this the best early

plum; since then the Sea plum and Prince's Yellow Gage have come into bearing, and we now consider it as merely a good bearer of fair quality, not often affected with rot. Raised by Mr. Camack from a stone brought from Italy by R. H. Wilde. Ripe June 15th.

4. PRINCE'S YELLOW GAGE.—Received here under name of the Harvest Gage—ripe June 15th. It proves with us one of the very best. The tree is very productive and the fruit lasts a long time, ripening gradually for nearly a month. As it comes early in the season, while good fruit is scarce, is pretty free from rot and lasts so long—bearing an abundant crop of fruit of the best quality, sweet, juicy, and most agreeably flavored, I think it may be considered the most desirable plum here cultivated at present. Will supercede Wilde's.

5. BREVOORT'S PURPLE.—Ripe June 18th. Bore a fair crop of tolerably good plums, but not as good as the next, which ripens at the same time.

6. ITALIAN DAMASK.—Ripe June 18th, a fortnight earlier than last year. Tree productive—fruit sweet and fine flavored, worthy of cultivation, not subject to rot.

7. WASHINGTON.—June 20th begins to ripen. A large and handsome plum, and that is all the good we can say of it. The tree does not bear very well, and the fruit is dry and flavorless. This may be owing to the season, but, so far, upon the whole, it is not worth raising. It is much inferior to the Horse plum in quality.

8. COLUMBIA.—Ripens June 20th. This magnificent plum can hardly be praised too highly. It is large and beautiful—not much subject to rot, of excellent quality and sufficiently productive. Tree hardy. Should be in every garden.

9. DUANE'S PURPLE.—June 25th begins to ripen. A large fine looking fruit, very productive and fruit pretty good, with a pleasant acidity, quite juicy, somewhat subject to rot, but worthy of cultivation.

10. KNIGHT'S LARGE GREEN DRYING.—Ripens last of June—bears pretty well and not much subject to rot, but is too dry and lacks sweetness. It is a very insipid plum—not worth cultivating.

11. BINGHAM.—Ripe July 1st. One of the finest plums here grown, large, juicy, sweet, and excellent. Tree a fine grower and bears well. Indispensable.

12. BLEEKER'S GAGE.—Ripe July 1st, twenty-five days earlier than last year. An excellent plum, but not quite so valuable as Prince's Yellow or the Imperial Gage; worth cultivating.

13. ELFREY.—Ripe July 1st. You may be surprised to see the high opinion we have of the Elfrey. In this section it is a plum of high merit. In this opinion all who raise it here concur. Though the fruit is scarcely of medium size, this is more than compensated by its abundant crops. The fruit of the Elfrey with us is far from being dry. It indeed is almost as sweet and juicy as the Imperial Gage itself. Nothing but frost ever prevents its bearing a full crop of delicious fruit. It is the best flavored blue plum we have, and one of the best six varieties here cultivated. It rots a little, but there is always an abundance of good fruit in spite of rot or curculio. Tree thrifty and hardy. Indispensable.

14. IMPERIAL GAGE.—This is, to my taste, the most delicious plum here cultivated. The Yellow Gage and Elfrey rank next in this respect. Though I have placed the Yellow Gage as the first in all respects, it is from its season only. Ripe July 1st, and the fruit so gradually matures, that it lasts about a month. Is not much affected with the curculio, but rots considerably. Fruit very juicy and luscious, almost too sugary. A great bearer, and a fine hardy tree. Indispensable.

15. HORSE PLUM.—Ripe 1st of July. A hardy productive plum not much liable to de-

cay, but worth cultivating only for culinary uses, for which the Red Magnum Bonum and Duane's Purple, are much better.

16. St. Catharine.—Ripe about July 5. This is probably the true name of a plum received here as the French Prune. It proves a pretty good plum tree, hardy and prolific. Flesh firm, rich and good flavored, but somewhat dry.

17. Diamond.—Ripe July 5th. Tree productive and hardy. Fruit of the largest size, but coarse and flavorless. Would do for the kitchen—but rots worse than any other variety except Smith's Orleans; not worth growing.

18. Manning's Long Blue Prune.—Ripe July 5. A pretty good bearer. Fruit large, handsome, and of fair quality. Will do to swell a collection, but would not probably get stolen where the Imperial Gage was abundant. Not very liable to rot.

19. Smith's Orleans.—July 5th begins to ripen. A great bearer, but extremely liable to rot. Fruit pretty good, and in good seasons it would be a profitable plum.

20. Gen. Hand.—Ripens July 8. Large and handsome, but the tree is not a good bearer with us. The fruit, too, we consider rather indifferent. Not worth cultivating.

21. Semiana of Boston.—Bears a fair crop of harsh acid fruit, and is about the poorest plum we have. Ripe July 8.

22. German Prune.—Ripe about July 8. The tree is hardy, and bears exceedingly well, but the fruit is dry and indifferent. If it will make good prunes, might be worth cultivating, but not for the table.

23. Red Magnum Bonum.—Ripe July 10. The tree is a good grower and bearer—fruit very large and handsome; juicy and agreeably sub-acid. A fair plum for the table, and makes the very best of preserves. Not much subject to rot, and upon the whole, indispensable.

24. Blue Plum.—July 15. This is the not very definite name borne by a plum very well known in this vicinity. Fruit medium size, roundish, scarcely oval; suture very obscure; skin dark blue, with a fine light blue bloom; stalk three-eighths of an inch long, inserted in a shallow cavity; flesh yellowish green, juicy, sweet, and refreshing—adheres to the stone; shoots smooth; leaves rather small. A very pleasant and agreeable plum, and the tree is a fine bearer. It is generally propagated by suckers. Does not rot.

25. Jefferson.—July 20th it was ripe this year; last season the 7th of August. We are a little disappointed in the quality of this plum, as it is somewhat inferior to the Elfrey, Yellow and Imperial Gages, Blue Plum and Columbia. It lacks juiciness and flavor; but then it has merits which will always render it one of the most desirable of plums. It is of the largest size, and the handsomest of all plums. The tree bears abundantly, fruit hangs on a long time, and it is almost the only plum that is perfectly free from decay. It seems so far to defy the rot. It is also the latest plum that with us has come into bearing; and in spite of its defects, is absolutely indispensable, even in a collection of no more than three or four varieties.

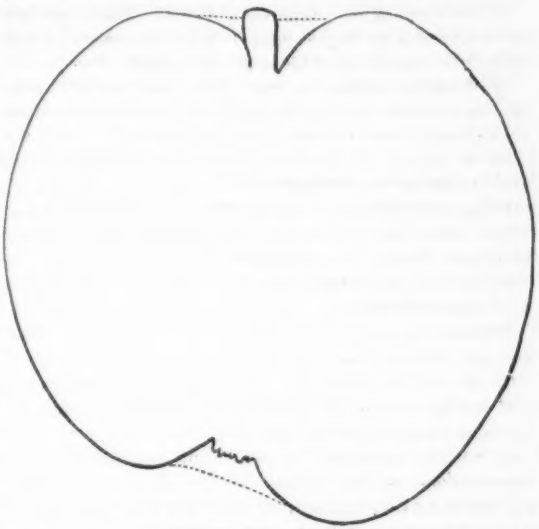
A few other plums have borne here, but are not fully tested. The Green Gage died just as it commenced bearing. Huling's Superb, Lawrence's Favorite, Coe's Golden Drop and Sharp's Emperor, were invoiced, but nothing about the trees corresponded thereto, except the tallies. So of some others. A number of plums not mentioned, have not yet come into bearing here.

From the above list, which includes all that we can speak of with confidence, the most desirable three varieties that can be selected for a succession, are Prince's Yellow Gage, Imperial Gage, and Jefferson.

For best six, add Sea, Elfrey, (or Columbia,) and Red Magnum Bonum, for preserves.

Add to these Chickasaw, Bingham, Blue Plum, Italian Damask, Bleeker's Gage, Duane's Purple, and St. Catharine, for drying, and you have all that are desirable.

It is proper to add that these notes are not the result of my own observations, solely. In collecting material. I have been *greatly indebted* to Dr. WARD and Dr. CAMAK, of this place, both for the results of their larger experience, and for their kindness in supplying specimens of nearly everything which for four years past, has fruited in their fine collections.



The Horse Apple.—Average size.

Enclosed you will find an outline of the Horse Apple, which is unusually fine this year. In flavor and consistence it is more like the Rhode Island Greening than any other variety in my knowledge. It is a good cider apple, also.

A lady subscriber of this place has the Fastolff Raspberry, of which the flavor is very well, but of the little drupes or carpels which compose the berry, only three or four swell to each berry; the rest dry up and are abortive. The plants thrive well enough. Can this infertility be cured, and how? If not, the variety is worthless.

Two errors in the July number need correction. To destroy the wooly aphis, I directed the whole tree to be *washed* in soap-suds—not worked—which is nonsense. Again, the stem of the Red June Apple, is from one-half to three-fourths of an inch long, and not as printed, from *one and a-half* to three-fourths, which is incorrect.

Yours very truly, WM. N. WHITE.

Athens, Ga., July 26, 1852.

THE PHILOSOPHY OF THE DESTRUCTION OF PLANTS BY FROST.

BY PROFESSOR LINDLEY.*

The past winter of such extraordinary severity, has led to a good deal of speculation as to the precise action of severe frost upon vegetation. As but little has been written upon this subject, in this country, we have thought it might interest our more inquiring readers to know the views of the principal European physiologists. Prof. LINDLEY gave, some

* Transactions of the London Horticultural Society, Vol. II., 2d series, part IV.

time ago, an excellent abstract of their views, accompanied by some conclusions of his own, in the following article, which will repay perusal. Ed.

"In considering the various circumstances alluded to in this paper, I was naturally led to inquire into the exact manner in which the death of plants is caused by cold. Very little, however, is to be learned upon this subject from the writings of physiologists.

"The common opinion is, that frost acts mechanically upon the tissue of plants, by expanding the fluid they contain, and bursting the cells or vessels in which it is enclosed.

"M. Gœppert, of Breslau, in a paper originally read at the meeting of German naturalists, at Leipsig, in 1829, briefly abstracted in *Oken's Isis* for 1830, p. 497, and translated in the *Edinburgh Journal of Natural and Geological Science for* 1831, p. 180, denies that this supposed laceration of vegetable tissue by frost, takes place. He is represented to have stated, that the changes which plants undergo, when they are killed by cold, do not consist in a bursting of their vessels or cells, but solely in an extinction of vitality, which is followed by changes in the chemical composition of their juices.

"Professor Morren, of Liege, in a paper printed in the fifth volume of the *Bulletin de l' Academie Royale de Bruxelles*, has published some exceedingly interesting observations upon this subject. Like M. Gœppert, he denies the truth of the statement generally made, that frost produces death in plants by bursting their vessels; and he assigns the effect to other causes. His more important conclusions are, 1. That no organ, whatever, is torn by the action of frost, except in very rare cases, when the vesicles of cellular tissue give way, but that the vesicles of plants are separated from each other by frost, without laceration. 2. That neither the chlorophyll, the nucleus of cells, elementary fibre, amylaceous matter, raphides, nor the various crystals contained in vegetable tissue, undergo any alteration, unless, perhaps, in the case of amylaceous matter, which, in some cases, is converted into sugar, no doubt, in consequence of the action of some acid, formed by the decomposition of the organic parts. 3. That the action of frost operates separately upon each individual elementary organ, so that a frozen plant contains as many icicles as there are cavities containing fluid; the dilitation thus produced not being sufficient to burst the sides of the cavities. 4. That such dilitation is principally owing to the separation of the air contained in the water. 5. That this disengagement of air by water, during the act of congelation, is the most injurious of all the phenomena attendant upon freezing: introducing gaseous matter into the organs not intended to elaborate it, and bringing about the first stage in the decomposition of the sap and the matters it precipitates; so that with a thaw commences a new chemical action, destructive of vegetable life. 6. That the expansion of the cells, and aquiferous organs, drives a great quantity of water into the air-cells and air-vessels, so that the apparatus intended to contain liquid only, contains water and air, while that which is naturally a vehicle for air, conveys water. Such an inversion of functions must necessarily be destructive to vegetable life; even if death were not produced in frozen plants by the decomposition of their juices, the loss of their excitability, and the chemical disturbance of all their contents.

"Professor Morren's observations were made upon various plants frozen in the spring of the present year, having been exposed to a temperature of —4° to +9° Fahrenheit. One of his statements I give in his own words. 'In the parenchyma of many plants, and especially in that of succulent fruits, it is easy to ascertain what modifications are caused by frost in the internal organs of plants. If a frozen apple is opened, it is obvious that the ice is not a continuous mass, but that it is a collection of a multitude of little microscopical icicles. Under the microscope the fact becomes evident. We know how excessively hard some fruits become when frozen by this mosaic of icicles, especially pears. If

we thaw them, it is seen that on the instant a multitude of air-bubbles are extricated from the juice of the fruit, and that this juice has then acquired new chemical qualities. I wished to ascertain the cause of these phenomena, and the following is what observation has shown me. I studied for this purpose, more particularly the tissue of the apple. Each cell is filled with a small icicle, which has in its middle a bubble of air. We know that when water freezes, the crystals so arrange themselves, that the air separated from their mass by the solidification of the liquid is intercalated between their planes. This air also places itself in a mass of congealed water in a regular manner, the nature of which depends entirely upon that assumed by the crystals, as may be seen by freezing water in a cylindrical vessel, when the air-bubbles always assume the form of a very long cone, terminated by a spherical cap. The augmentation of the volume of water is in a great measure owing to this interposition of masses of air. All these effects take place in each cell of a frozen apple, which thus increases in size because each cell of its tissue becomes individually larger. When thawed, the cell recovers itself by the elasticity of its vegetable membrane, and frozen fruit becomes, as we know, very much shriveled. Each cell, therefore, acts like a bottle of frozen water, only there is no bursting, because the membrane is extensible.'

"But when plants easily killed by cold, are exposed to so low a temperature as that just described, it is to be feared that phenomena actually connected with the destruction of vegetable life, may be intermixed with others, which merely indicate the physical effects of cold upon vegetable matter already dead. For the purpose of judging how far this conjecture is well founded, I have carefully examined the *post mortem* appearances of several plants killed by exposure to a temperature artificially reduced only to from 28° to 30° Fahrenheit. These observations, while they have confirmed the general accuracy of Professor Morren's statements, have led to other conclusions which also appear important.

"I could not find the vesicles of cellular tissues separable from each other, even in the most succulent species submitted to experiment, and I conclde that this circumstance, to which Professor Morren attaches importance, and to which M. Payen ascribes the difficulty of extracting starch from frozen potatoes, is not so much connected with the destruction of vegetable life, as a result produced upon the tissue by a great intensity of cold. I did, however, find it lacerated in several cases, as if by the distension of the fluid it had contained. In a Stapelia the whole of the cellular tissue was soft, and deformed, as if it had been extended, with but little power of recovering itself again, and several large irregular lacerated cavities were observed. The same appearances were remarked in Euphorbia Tirucalli, but the laceration of the tissue was much less extensive. In Hibiscus Rosa Sinensis the cells of the cortical integument, (mesophlœum,) were very much torn, and in Hibiscus militaris, not only the cells of the bark, but especially those of the pith, were so completely broken up, that it was difficult to obtain a thin slice of those parts for examination. In no case, however, have I found any kind of tissue ruptured, except the soft cellular dodecahedral or prismatical. It would also seem that M. Payen recognizes the laceration of tissue by frost, for he ascribes the acridity of frozen potatoes to an extravasation of the acrid matter which exists in the epiphlœum of such tubers, and which, in a natural state, is locked up in the cells of which that part consists. Independently of these observations, it is not to be doubted that frost does split the tissue of plants. I saw the youngest shoots of Erica mediterranea, cinerea, and others, shivered into thousands of pieces in the Horticultural Society's Garden, on the morning of the 20th of January. The branches of the Melaleucas were rent to their points at Carclew. Several cases, among

others that of the common holly, were observed at Claremont, where the bark was split and rent asunder from the wood below it; and Sir Oswald Mosley has given me the following instance, which occurred under his own observation. 'An oak tree, growing upon the south side of a hill, in a sheltered situation, in Knightly Park, near Burton-upon-Trent, in the county of Stafford, was rent in the severe frost of last winter in two different places, to the height of thirteen feet three inches. There was an interval of eleven inches between the two shakes, which were each of them one-quarter of an inch wide, and extended in depth to the heart of the tree. The girth of the tree is six feet ten inches, and as soon as the frost went the openings closed again, and the tree is now as flourishing as ever.' To these cases many more might be added.

"The organization of woody tissue appears to be affected, but not by laceration. If a frozen and unfrozen transverse slice of the stem of Hibiscus Rosa Sinensis be placed, side by side, upon the field of the microscope, it is obvious that the diameter of the tubes of the wood and liber, is considerably less in the former than in the latter; this appears to be owing to an increase in the thickness of the sides of the tubes, which has the effect of diminishing their calibre.

"The expulsion of air from æriferous organs, and the introduction of it into parts not intended to contain it, is a striking phenomenon. Every one must have remarked that when a leaf has been frozen to death, it changes color as soon as thawed, acquiring a deeper green, and being of nearly the same depth of color on both sides; the same appearance is produced by placing a leaf under the exhausted receiver of an air-pump, and in both cases is owing to the abstraction of air from the myriads of little air-chambers contained in the substance of this organ. If the leaf of Hibiscus Rosa Sinensis in its natural state is examined, by tearing off the parenchyma from the epidermis with violence, it will be found that the sphincter of its stomates, the cells of the epidermis, and the chambers immediately below the latter, are all distended with air; but in the frozen leaf of this plant, the air has entirely disappeared; the sphincter of the stomates is empty; the upper and under sides of the cells of the epidermis have collapsed, and touch each other, and all the cavernous parenchyma below the epidermis is transparent, as if filled with fluid. Whither the air is conveyed is not apparent; but as the stomates have evidently lost their excitability, and are in many cases open, it may be supposed that a part of the air at least has been expelled from the leaf; and as the pith of this plant, in its natural state, contains very little air, and in the frozen state is found to be distended with air, it is also probable that a part of the gaseous matter expelled from the leaf when frozen is driven through the petiole into the pith. In the petiole of this plant are numerous annular and reticulated vessels, which, under ordinary circumstances, are filled with air, but after freezing are found filled with fluid; is it not possible that their functions may have been disturbed, by the violent forcing of air through them into the pith, and that when that action ceased, they were incapable of recovering from the overstrain; and filled with fluid filtering through their sides? That annular ducts are in some way affected by frost, was shown by their state in a thawed branch of Euphorbia Tirucalli, when they were found in a collapsed state, empty of both air and fluid, with their sides shrivelled, and with the fibre itself, which forms the rings, also wrinkled transversely. Facts of an analogous kind were remarked by me in Erica sulphurea. The minute long-haired leaves of this species are in their natural state firm, bright green, with a rigid petiole, and upon being exposed to pressure in a *compressorium*, at first offer perceptible resistance to its action, and afterwards, as the pressure increases, discharge, chiefly through their petiole, a great quantity of air. But leaves of this plant, which have been frozen by exposure to the tem-

perature of 27° are very different; they are softer, dull olive green, with a flaccid petiole, and offer but little resistance to pressure: yet, although they give way freely, the quantity of air which the compressorium expels is comparatively small, and readily driven out. Moreover, the long hairs of this plant, which in the natural state are occupied by fluid, were always found filled with air after freezing, and this without pressure having been exercised upon them.

"I am inclined to refer to this cause the well-known fact, of which many cases occurred this winter, that the sudden exposure of frozen plants to warmth will kill them; though they may not suffer if warmed gradually. In such cases, it may be supposed that the air, forced into parts not intended to contain it, is expanded violently, and thus increases the disturbance already produced its by expulsion from the proper air cavities; while, on the other hand, when the thaw is gradual, the air may retreat by degrees from its new situation without producing additional derangement of the tissue. It is also possible that leaves, from which their natural air has been expelled by the act of freezing, may, from that circumstance, have their tissue too little protected from the evaporating force of the solar rays, which we know produce a specific stimulus of a powerful kind upon those organs.

"These circumstances are, in themselves alone, sufficient to account for death being produced in plants by frost; and it is chiefly to such as these, that Professor Morren has directed his attention. It however appears to me that there are some other points of importance to which observers have not applied themselves.

"The green coloring matter of leaves, or chlorophyll, is certainly affected by so little as only two or three degrees of frost. In Stapelia, when thawed, it is found collected into clusters, and apparently half dissolved. In Euphorbia Tirucalli, when the plant is alive, it is extremely abundant, and consists of distinct spheroidal transparent particles, but, after a slight freezing, a considerable part of it disappears, and the remainder loses its transparency, becomes fusiform, is sometimes surrounded by coagulated gelatinous colorless matter, and many of the particles appear as if burst. In the green subcutaneous parenchyma of the leaf of Hibiscus Rosa Sinensis, the vesicles forming the sides of the air chambers are filled with distinct, angular, deep green particles, which, after freezing, become amorphous, and seem as if partially dissolved. It is possibly to the decomposition, of which these appearances are the incipient signs, that the extremely offensive odor of some frost-bitten plants, especially the Laurustinus, when thawed, is to be ascribed.

"The amylaceous matter, which is so abundant in many plants, also undergoes alteration. This has been remarked by Professor Morren, who found that when potatoes are frozen, a part of their starch disappears, leaving the deformed integuments behind it, and he suspected that the starch thus lost had furnished the sugar formed in the process of freezing this tuber. I believe it will be found a general fact, that starch is materially altered by frost, for I have always found that the amylaceous particles seem less abundant in a plant after freezing than before, and of those which remain, a part is generally becoming amorphous, clustered together, and certainly diminished in size. This is particularly striking in Hibiscus militaris. In that plant the cells of the pith abound in amylaceous granules, and are often quite filled with them; and they also occur abundantly inside the cells of the bark, of the medullary rays, and even of the tubes of the wood, and, in short, everywhere except inside the woody tubes of the liber; so that a thin slice of the stem of this plant, treated with iodine, forms a most beautiful microscopical object. But after being frozen, a great part of the starch disappears, and the particles which remain are not more than a half or a quarter of their former size. I have not, however, remarked among them any appearance of dissolving; neither have I been able to observe

any change in the curious double-headed bodies, in form resembling dumb-bells, found in the vessels of Euphorbias, and supposed to be a state of amylaceous matter, because iodine colors them violet; they appeared to me to be in precisely the same state before and after the plant was frozen to death. M. Payen, however, denies that any starch whatever is lost in frozen potatoes (*Comptes rendus*, vi. 345;) but as only a small part of his important treatise on amylaceous matter has reached this country, I am unable to state in what way he explains the action of cold upon this substance.

"Finally, it appears that frost exercises a specific action upon the latex, destroying its power of motion. If, as Prof. Schultz supposes, this is the vital fluid of plants, such a fact would alone account for the fatal effects of low temperature. In all the cases I have observed frost coagulates this fluid, collecting it into amorphous masses. In Stapelia, where the laticiferous vessels are easily found, the latex itself is so transparent, that it is difficult to perceive it in a living state, even with the best glasses; but after freezing it is distinctly visible, resembling half coagulated water. In the Hibiscus above mentioned, the stem is covered with long, rigid, simple hairs, filled with a plexus of capillary laticiferous vessels of extreme tenuity, but in which the motion of the latex may be seen beautifully with the one-eighth of an inch object glass of an achromatic microscope. Upon being thawed, after freezing, all this apparatus is found reduced to some misshapen separate sacs of fine grumous matter, in which no motion can be detected. That these vessels lose their vitality after freezing, may indeed be seen without the aid of a microscope; for if a stem of a Ficus elastica, or a Euphorbia, or any such plant, which discharges an abundance of milk when wounded, be first frozen, and then thawed, no milk will follow the incision.

"From these facts, I think we must draw the conclusion, that the fatal effect of frost upon plants is a more complicated action than has been supposed; of which the following are the more important phenomena:

"1. A distention of the cellular succulent parts, often attended by laceration, and always by a destruction of their irritability.

"2. An expulsion of air from the æriferous passages and cells.

"3. An introduction of air, either expelled from the air passages, or disengaged by the decomposition of water, into parts intended exclusively to contain fluid.

"4. A chemical decomposition of the tissue and its contents, especially of the chlorophyll.

"5. A destruction of the vitality of the latex, and a stoppage of the action of its vessels.

"6. An obstruction of the interior of the tubes of pleurenchyma, by the distension of their sides.

"These phenomena may be considered in part mechanical, in part chemical, and in part vital. The two latter are beyond our control, and probably depend, in part, upon the quality of fluid and organic matter, which may resist the action of the cold in different degrees, according to their various modifications; and, in part, upon specific vitality. Salt and water freeze at various temperatures, according to the density of the mixture, from 4° to 27°; oil of turpentine at 14°; oil of bergamot at 23°; vinegar at 28°; milk at 30° water at 32°; olive oil at 36°; oil of anise at 50°; and it is not to be doubted, that in like manner, the fluid contents of plants, which we know are indefinitely modified, will resist the action of cold in very different degrees.

"The mechanical action of frost may, however, undoubtedly be guarded against to a great extent. It is well known, that the same plant growing in a dry climate, or in a dry

soil, or in a situation thoroughly drained from water during winter, will resist much more cold, than if cultivated in a damp climate, or in wet soil, or in a place affected by water in winter. Whatever tends to render tissue moist, will increase its power of conducting heat, and consequently augment the susceptibility of plants to the influence of frost; and whatever tends to diminish their humidity, will also diminish their conducting power, and with it their susceptibility; this is an invariable law, and must consequently be regarded as a fundamental principle in horticulture, upon attention to which all success in the adaptation of plants to a climate less warm than their own, will essentially depend. The destructive effects of frost upon the succulent parts of plants, or upon their tissue, when in a succulent condition, may be thus accounted for, independently of the mechanical expansion of their parts; indeed, it is chiefly to that circumstance, that Dr. Neuffer ascribes the evil influence of cold in the spring; for he found that at Tubingen, nearly all the trees contain eight per cent more of aqueous parts in March, than at the end of January: and the experience of the past winter shows, that the cultivation of plants in situations too much sheltered, where they are liable to be stimulated into growth, and consequently to be filled with fluid, by the warmth and brightness of a mild protracted autumn, exposes them to the same bad consequences as growing them in damp places, or where their wood is not *ripened*, that is to say, exhausted of superfluous moisture, and strengthened by the deposition of solid matter, resulting from such exhaustion."

HOW TO MAKE AN AMATEUR.

BY N. Y. H.

The history of trees in the United States, has been too much after the following fashion; much of the land had the reputation, if it had not the reality, of abounding in chills and fevers, or fevers alone; whether the trees by causing dampness, or the unwonted exposure of the settler caused disease, the native forests were considered in fault. To some extent this was true, for till the country in many places, was cleared, and the sun, that vivifier and sweetener, was let in, miasmatic influences were more or less rife. Tree followed tree, and when they were all down, and the house built, the settler had what he believed he wanted—*a clearing;* he too often did not reflect that a belt at the north of his dwelling would keep the wintry blasts from roaming down his chimney, or protect his sheep and poultry. His wife wanted sun to dry the clothes, never thinking of thermometers at 90°, and *a clearing* both parties had. The settler, however, either moved further to swing his indiscriminating axe in the same manner, or, as many a sad history would tell, if it had a Laurie Todd to commemorate it, he and his wife fell victims to over exertion and exposure.

The next owner is probably a man of more means; a little cultivated himself, he would like to see cultivation around him; he looks about for trees to fill the gaps so ruthlessly made, but sees or hears of none for sale in the vicinity, except it may be very small ones; so he either moves a few from the remaining "woods," without knowing what precautions to use, or adopts the small ones from the distant nursery. In either case, two owners must live under the influence of cold winter winds, and hot summer suns. What is to be done in the matter?

It is somewhat difficult to find an answer that will at once remedy the evil, but we will

quote CICERO on the subject, as our best refuge for a reply. "If," says he, "a man would build, he should reflect a great while, and perhaps not build at all; but if to plant is the question, he should not reflect, but plant immediately." Wise CICERO! no better advice could be given by the best modern editor.

What shall we plant, inquires the new owner of the clearing. We answer, take a little pains to plant trees for shade, that will produce something either in the shape of timber or fruit. What more ornamental trees than our true shellbark hickory, or the white oak; we have one of the latter now in our eye, not fifty years old, which is a model of strength and beauty; very sure, we are, that the owner, who planted it himself, would decline five hundred dollars for it; and certainly, in the estimation of every person of taste, it adds more than that sum to the sale value of his estate.

It is a curious circumstance which we have often remarked, that the generality of persons, whose attention has not been particularly drawn to the cultivation of trees, &c., are not aware what it is that produces their pleasure, when suddenly introduced into a properly planted and cultivated pleasure garden; they are surrounded by beauties, but they do not define, because they do not know the plants before them; yet something teaches them that they are in the presence of beauty and novelty; the whole effect is good, and they involuntarily exclaim, "how delightful! how we should like to live here!" Here is the intuitive love of nature. Let the same individual learn to know each particular plant, its history, origin, home, what length of time it has been introduced into gardens, its rarity, its uses, the height it attains, whether of rapid or slow growth, to say nothing of its botanical distinctions, and the enjoyment is increased a thousand fold; every plant so studied is an old friend, recognised and greeted wherever we go. There is no real knowledge acquired, that is not valuable and agreeable; botany, geology, astronomy, are continual sources of pleasure, whatever country we visit; let a person but thoroughly know the varieties of the rose by name and peculiarities of habit, and ever after a garden is visited with vastly increased delight; suppose that amount of knowledge multiplied by reading, observation, practice, and study, till we know in addition most of the new trees and plants, as well as those of older introduction; with what gusto and vivacity one searches for and sees a novelty of which he has only read. But we are straying from our clearing, for whose adornment this periodical has already given, and will continue to give, lists of the most valuable and easily procured trees, for shade and product.

After the planter has made up his mind what to plant for immediate effect, and what for posterity—for we hold the axiom, so often in the mouths of the unreflecting, that because posterity has done nothing for us we will do nothing for posterity, in utter abhorance—he will ask his life companion,—she is entitled to be consulted in all such cases,—what fruits she most values; he will be glad to learn that by planting the Spanish Chestnut he can have a companion tree to his white oak, which, like it, will throw out its lateral branches, and spread over the lawn, producing in a very few years not only fine shade, but bushels of its large and delicious nuts to astonish and gratify himself and his visitors. So far he has cultivated himself, and bids fair to become an amateur; the clearing in his minds eye has assumed a new shape and value, and he takes to studying during the winter evenings, some further particulars; these acquire intense interest as he proceeds; books are consulted, but unfortunately books do not tell him *all* that he wants to know, for he has yet to learn his a, b, c, in horticulture. One great object of periodicals, like this, is to inform him. He does not know, perhaps, that yearling fruit trees can be had at Rochester, Flushing, Philadelphia, and other places, for a very small sum; that yearling pears, cherries, apples, plums, apricots, and so forth, of the finest sorts, grafted

so as to dwarf them, are to be purchased for the price of two or three shillings each, while apples, &c., are even cheaper. Where is he to get a catalogue? Let him look at the advertisements attached to this periodical, and selecting his nurseryman, commence his correspondence without delay, for every year's advance brings him nearer to the goal of his wishes. Let him at once read Barry's Fruit Garden, to learn the simple and best practical methods of trimming, and when his first year's purchases are in the clearing —our word for it, he has a source of pleasure in store, and baskets full of fruit in prospect, which will prove a never failing source of occupation, mental and physical, as long as he occupies his improving premises. These pets will be society to him in his otherwise lonesome hours; if he will at once take up the subject of a kitchen garden, his home is complete, the only danger being that he will not be induced ever to leave it. The first winter let him force a small hot-bed of salads and radishes, (with a corner filled with the most useful green herbs for his cook's especial delight) with his own hands, watching its progress, moving its shutters and glasses with every considerable change of temperature, reading up to his subject, visiting and observing his nearest successful neighbor, and he has out-door, healthful occupation for his winter, both day and night; such an amateur as our friend (for such we shall ever after call him,) has now become, will not go to sleep as soon as tea is over; he will read and re-read McMahon's Kitchen Gardener—one of the very best, *after all*, on the subject; Downing, Thomas, and Barry on Fruits, will become his manuals, while Parsons and Rivers on the Rose, will be consulted for a little variety. With what pleasure will he read Loudon and the horticultural and agricultural periodicals; we shall not despair in another year of seeing him bring into the parlor, for display to his neighbors, his largest pumpkin, which he remarks is a valuable article, it looks so like having *results*. A Ward's case, and a few house plants that will thrive in a sitting room, among which is a fine ivy in a receptacle large enough to contain its large roots, will make in-doors in a snow storm not only tolerable but delightful. Have we conjured up an amateur, by detailing the process by which this healthy action of the mind is produced? If so, we wish there may be thousands of these added every year to our population; thousands may be added, but we want thousands more.

N. Y. H.

CRITIQUE ON THE JULY HORTICULTURIST.

BY JEFFREYS.

How to Popularize the Taste for Planting.—A very palatable talk to all, except such professional gardeners and nurserymen as think that every thing they *give away* is lost. Yet your reasons why they should believe in such doctrine, are too palpable to be long resisted by them. Our agricultural and horticultural periodicals, are doing great things in this line, among our country people, and planting once *the fashion*, every body's house will be smothered in trees and climbers. Railroads, too, help the people to travel. They thus see what other folks do; and they—that is, the most observant of the travellers—go home and do likewise. Rely upon it, the taste for planting is in progress. Compare the recently built farm-houses all over the country, with those of our boyhood, and mark the change! Then, they were as utterly bare of trres as of out-houses; stood all alone by themselves, naked, inhospitable, and desolate to the eye. Now, even the same old tenements, inhabited by people of better taste, are changed in their outward style; various

offices are attached, and they are comfortably nestled amid the deep shadow of fine trees, and rejoice in plats of shrubbery and flowers.

It is wonderful to compare the taste of the laboring English with that of the same class of people in our own country. The one you can scarcely keep from cultivating his flowers; and if he, himself, has no time to attend to it, his wife and daughters will. The other you can neither drive nor coax into the slightest attempt of the kind. I have a quiet little cottage at one end of my principal farm—the tenement itself humble in appearance—scarce worth an hundred dollars. I put into it an American "hired man," who chopped wood in winter, worked on the farm in summer, and was a capital hand at all sorts of rough labor. I had some fine young forest trees about the place, a comfortable garden stored with currant bushes, roses, and such like little affairs, as would make a laborer's home cheerful—for I like to see every body about me in the enjoyment of such little pleasant things, not costing much, and looking pretty. When he removed into it, I told him how comfortable and convenient these little appendages would be about the place, yet observed the incredulous and staring *look* he gave me by way of reply. To cut the matter short, during the year the man occupied the place, his "young barbarians" hacked into, girdled, and spoiled several of my trees; the currant bushes were mostly stripped of their branches to carry into the "shanty" to pick the fruit from, while the cow came in to browse the remainder. The pig was let loose into the wretched, weedy garden, after the potato and cabbage patches were cleared, and he rooted up the roses and hollyhocks, and the place was sadly in ruins. When I remonstrated against such vile destruction, the answer was, that "they had no use for such knick-knacks, and did'nt see the need of them!" This man "walked Spanish," of course, at the end of his year, and was succeeded by a quiet English laborer in like capacity, bating the "wood chopping"—Englishmen usually knowing little of such labor. And now came a change truly. "Oh, what destruction has been made here!" would he often exclaim. "I must fix these little things all up again. A nice bit of fruit we'll get from these currants, and properly trimmed they'll grow some good shoots again; and, sir, may I go into your *house*-garden and take up a few side-roots from the pœonys and roses, and sum'mut of other things that can be spared, and put in here? for I hate to see a place naked, and without something to rest one's eye on of a Sunday, and to give my wife a flower-pot now and then." "To be sure you can," was the reply, "and the more of them the better." All this was done in the course of the spring, and no time lost either—for it was accomplished out of the regular work hours; and in less than a twelvemonth the place was turned into a little paradise, where I often drop in and take a quiet chat as I pass, and learn from the laborer and his good-mannered wife, much of the humble and rural life of England.

This, to be sure, is in a sphere below the class for which the article under note is intended. But it is a part of the system, and the subject. The parallel will hardly, perhaps, hold good with the higher classes in America, but the difference in the taste of the two people is surprising. This difference is partly incidental to the newness of our land, but much more owing to a *want of taste*—that's the flat reason. Here, we go blundering and daundering along, looking to the "main chance," and to the main chance only, as if to gather together dollars and estates, with which to bespoil our children who are to come after us—and in which latter purpose we usually succeed to admiration—were the only object worth striving for in life! On the whole, however, we are improving—but not half fast enough.

Plan for Industrial Universities.—It is quite apparent that Professor TURNER is no "old fogy" in his notions of practical education. He is a man of sound sense and accu-

rate views on this subject, and when more men like him get control of these matters, we may expect some useful result from the vast means which our different states, and our general government, have at command for such purposes. But a host of literary "grannys," who think that "education" is only intended for "the professions," must first retire from the field. Railroads, steam engines, and telegraph wires, will run them off the track after a while, and the demands of the time will set the thing right. So we live in hope.

Birds, Insects, and other matters.—A man who writes with the perspicuity and force, of J. C. H., should tell us something to instruct as well as to amuse. There is pith in him, beyond question; and he holds a quarry of information behind these salient arrows which he lets fly with such facile directness. He has a kind heart too; otherwise he could not talk of the charming little birds as he does. But my friend, many of them *do* catch worms—caterpillars even—and bugs, and spiders, although *you* may not believe it.

Closing remarks on the Theory of Pruning.—This is a most comprehensive subject, and I regret that Mr. YOUNG has "closed" it so soon. The question of "pruning" cannot be fully treated of in a *general* way. It must be applied to limited culture, as in the garden, the close fruit yard—to dwarf cultivation in fact, where ringing, tortillating, and root pruning may be tolerated. Also, to open orchard culture, and on different principles altogether, in practice, from the other, to make it applicable and understandable to all who would profit by its discussion. Dwarfing is, in truth, a *perversion* of nature—not wrongly—but for our own convenience and profit; consequently it involves more labor, more ingenuity, and is attended with greater risk, and demands deeper knowledge, and observation, both in vegetable physiology, and in the composition of the soils which may be occupied. In open, natural cultivation, the true theory of pruning is simple. Nature will there do her own work, with a little aid in removing incumbrances and repairing accidents. These performed, as a general rule, the less "pruning," *scientifically*, the better. But, *good cultivation* should be given, *always*. The best orchards, probably, in the United States, are those which have received little aid from the saw and knife, except in infancy, but whose soils have been well fed, if not originally stored with proper food, and carefully tended. Nature, to be perfect in any of her works, should not be forced. *We* may be impatient. Not so her. In her elaborate and harmonious labors, time must be given for all things; and all we have to do is to understand what she intends, and only lend her that grateful aid which will be amply repaid in ten-fold blessings upon our endeavors.

Fruit growing at the South.—By "South," I suppose is here meant any territory below Mason and Dixon's line, for the neighborhood of Washington is not farther south than Cincinnati, which at the *real* "south," is called "north." It is a most refreshing idea to one who has the true feelings of an American about him, that there is a spirit waking up for *good* cultivation of any thing in that hitherto *tabooed* District of Columbia —as if it was not enough that the political bile of the country should concentrate there for its annual eruptions, but that its influence should keep one of the naturally loveliest spots on the globe, about it in a state of sterility. To foreigners, familiar with the capitals of their own country, after visiting Boston, New-York, and Philadelphia, Washington must look like a city of magnificent conceptions, wholly blocked out, partially built up, and then newly caught and squatted down into one of the most forbidding soils in the whole compass of the American continent. Instead of a place where the good taste and high cultivation of the several states should congregate and plant itself, to embellish the national capitol, every thing of the kind seems to have shunned it as they would an atmosphere of pestilence. I first knew Washington when a boy. Its market was then

supplied with miserable vegetables, raised by the neighboring "niggers," and who "trucked" their commodities to market in the oddest and most incongruous ways possible. A mule harnessed by the side of a broken down horse, or one of them "spiked" before a pair of the wretchedest "steers" on a miserable cart, or a worse waggon, and driven by an equally well conditioned "plantation hand," was the usual mode of transportation to the "city;" and these vehicles, with their appendages—that is, the jackasses and the "nigger"—standing in the open streets, were the "market houses" of the day. Starvelling poultry, and poor meats, were the companions of the meagre vegetables, and as for fruits, paw-paws wouldn't grow there, and persimmons were only in eating "after frost."

It is better now, somewhat, but Washington, in all these things, is a full century behind any other well conditioned town in America. It is a disgrace to somebody, that there is not higher and more abundant cultivation of fruits and vegetables in and about the place. The climate is delightful; bland as Italy, and inviting a world of vegetable wealth to its embrace. Prices are good, the demand for all edibles is steady and increasing, and why should not the country within sight of the capitol be a continuous and a perfect garden? I might guess, but that my solution might be offensive in some quarters; so I'll drop the subject. It is a good indication, however, that Dr. BAYNE has so spiritedly gone into fruit culture, and I hope that he will not only persevere, but that others will join him in such an important enterprise.

Memoranda on the Culture of Grapevines.—It appears, after all, to be a simple process to grow the best of grapes in a "cold grapery," to *those who understand it*. Some two years ago, I suggested in one of my critiques, the plan of getting up these establishments by contract, and on proper principles. Since then, I am gratified to learn, by his advertisement in your paper, that Mr. LUDLOW, of Yonkers, has undertaken the business, in which, I trust he has abundant patronage. I also suggested that a competent vigneron should plant the houses thus constructed, with suitable vines. Now, let me add a third requirement—which is, that in neighborhoods were these grape houses are built, competent vine dressers should establish themselves to prune and dress vines for those who need their services, in which occupation they would soon find abundant employ. Many people are deterred from building a grapery, from the fact that they cannot spare the time, and do not possess the knowledge of themselves to dress their vines, and cannot afford the expense of keeping a gardener for that purpose alone. They require only a small house and but a few vines for their family supply, and for the want of some such economical way of management, forego the luxuary these would give them. Why should not vine dressing become a profession in America, as well as in France, Germany, or Italy?

Seedling Foreign Grape.—A most welcome subject—an *American* seedling grape from *foreign* varieties, as I understand it. As Mr. ALLEN was kind enough to send me, through your hand, a specimen of this beautiful production, for which he has my thanks, I can fully confirm the good opinion you express of it. The muscat flavor, to my own taste, is altogether to its credit, and I cannot but hope Mr. A.'s success in its cultivation, will meet his wishes.

The seedling grape of Dr. VALK, of Long-Island, described in the June Horticulturist, if he be not quite mistaken in its qualities, is an achievement in the *hardy* grape cutlure of the United States. Aside from the Isabella and Catawba, we have scarcely a good out-of-door table grape for the *northern* states. These, when they ripen well, are delicious, and perfectly satisfactory grapes—and that is praise enough. But we do want a *good* table grape

that is hardy in the open air at Boston, Albany, Buffalo, Milwaukie and Prairie du Chien; and if at Montreal, so much the better. At neither of these places can the Isabella or Catawba be depended on, and neither are fit for *house* culture, not producing their fruit in such high perfection as when suitably located in the open air. Dr. VALK is entirely right in resisting all applications for slips and buds of his vine, until he has thoroughly tested it under his own eye, and for a term of time in which he shall become perfectly satisfied of its productiveness, high flavor, and *hardiness*—wonderfully different in this from the empirics who flood and cheat the country with their new nostrums, before knowing whether they are worth the moss they are packed in, or not. If Dr. VALK succeeds in the anticipated qualities of his grape, his honesty of purpose will be amply rewarded in his success, even if he fail to produce his "ten, twenty, or a hundred thousand plants" for sale. But this he can do likewise. The latest discovery which I have noticed in the "native grape" invention, is from a Yankee manufactory, at Stafford, Connecticut, which I have seen figured, and published in sundry papers, and advertised extensively, with testimonials to match, from the neighborhood of the "Stafford Iron Works," all up to the mark in describing its "great size," "soft pulp," "thin skin," and "delicious flavor." Wonder if the "soft" pulp is soluble in *aquafortis!* I was once at Stafford "Springs," and if that salubrious region of huckleberries, sweet fern, and iron ore, spontaneously produces such grapes as are thus described, it must be a rare spot of earth, indeed. Connecticut—all New-England as well—is full of small rapid streams, on the narrow bottoms or intervales of which, grow thousands of wild grapes of many varieties, both in size and color, but with pulp as hard and indigestible as bullets; and this new "CHARTER OAK" grape, as it is so pretentiously called, to all appearance, is one of the same unadulterated type, which I have often plucked in my younger days, of equal size, and no doubt corresponding flavor. Of course, boys love grapes, and I often *felt*, when gasping to get their coarse, hard pulps down my throat, much as a young turkey *looks* when trying to swallow an acorn larger than its own head! But the "invention" has gone forth, and no doubt long before this, the peddlers of the grape are abroad, with vines duly labelled, and certificates amply verified, to edify the good country people with this "unrivalled discovery." A safe deliverance to the poor mortals who have to eat them! The only marvel in the whole affair is, that this wondrous fruit has never found its way "to the Editor of the Horticulturist."

TO THE PUBLISHER.—Since writing the foregoing, the sad intelligence of the untimely death of Mr. DOWNING, has reached us. To that portion of the public with whom he communed with his pen, or who enjoyed his personal intercourse, his loss is irreparable. Polished in his manners; highly cultivated in his profession; gentle in his disposition; kind in his intercourse; of exceeding ability and great resource as an editor and an author, his death has left a void not easily nor readily supplied.

For many years Mr. DOWNING has exerted a leading and commanding influence in fashioning the public taste to the rural embellishment of our country, in the construction of buildings, gardens, lawns, and pleasure grounds. With many he was a standard authority, and it is certain that to his fine taste and discrimination we are greatly indebted for much of the improvement which has been so extensively and rapidly made in our country residences and grounds. As a Pomologist he was sound and practical, and a leading spirit in the progress we have accomplished in that interesting department of cultivation. In the very outset of his career—a young man—with so wide a harvest of reputation, use-

fulness, and enjoyment, before him, it is sad to reflect that he is so suddenly cut off, and his agreeable intercourse, and valuable teachings, are lost to us forever!

" The glories of our birth and state
Are shadows, not substantial things;
There is no armour against fate;
Death lays his icy hands on Kings;
Sceptre and crown
Must tumble down,
And in the dust be equal made
With the poor crooked scythe and spade."

With Mr. DOWNING my personal intercourse had not been frequent, but always pleasant. I have partaken of the hospitalities of his late delightful, but now desolate home, on the banks of the Hudson, made classic by his own graceful pen, where his intelligent and charming conversation, and the gentle attentions of one now in the fresh agony of widowhood, will live among my happiest recollections.

Nor does the public press throughout the country, fail to give utterance to the sorrow which Mr. DOWNING's death has created. His loss is lamented as that of a public benefactor—one who labored for the good of his fellow men. His works will live long after him, and

" —time, the beautifier of the dead,"

will cherish his remembrance in the images of taste and loveliness which he has planned and executed in many a spot that knew only barrenness, till his ingenuity and discrimition had adorned them with the most graceful associations of rural life.

Honor—gratitude, to his memory! and although at the hazard of violating the proprieties of the occasion, by obtruding my own private griefs upon your pages, I cannot but lament, that in being forever cut off from my accustomed intercourse with one whom I held so worthy,

" I feel like one
Who treads alone
Some banquet hall deserted;
Whose lights are fled,
Whose garlands dead,
And all but he departed!"

JEFFREYS.

CULTURE OF THE GRAPE IN COLD HOUSES.

BY A. MESSER, GENEVA, N. Y.

MR. L. TUCKER—The late Mr. DOWNING, whose melancholy death we sincerely mourn, expressed himself much pleased with a statement made by Mr. CHORLTON, describing his management of a vinery. It was in the Horticulturist of February last. I have reason to believe that all those who are attempting to grow the foreign grape under glass, were highly entertained by the article. The editor said that there were many others in the country who *might, if they would*, furnish a report of their experience. I was entitled to think myself in the number; and although my grapery is small, and built in a cheap manner, and the vines now growing only the third summer; and although gardeners are not to suppose that all they have to say, is worth printing, still I would like to make

a few suggestions, and fondly hope, at the same time, that they will elicit from others, additional information. Not to give an account of my management in full detail, I observe that I have endeavored to follow the best examples. And now at this date, (Aug. 10,) in a cold house, the Royal Muscadine is transparent, of an amber-like color, and almost ripe; the Black Hamburgs also are rapidly coloring. The growth has been all that I could expect; the vine and fruit free from mildew, or any disease whatever. I have expended but little money, but have given much personal attention to the vines.

The writer has been much gratified by often inspecting the grapery of Mr. H. L. SUYDAM of this village, who obtained the second premium at the agricultural fair last September. His house, though not large, is 30 feet long, of which the side of his barn makes the back wall. He has 12 vines in front, and eight or nine in the rear. This experiment is, on the whole, pronounced to be very successful. He enjoys the advantage of an open exposure, and has never been troubled with mildew. The older vines in front, are now laden with beautiful fruit, of luxuriant growth, and which in this vicinity, is the grand point of attraction for amateurs in grape cultivation.

Having occasion to go to New-York, two weeks ago, I availed myself of the opportunity, to go over to New Brighton and look into the vinery of J. C. GREEN, of which Mr. CHORLTON has the management. The vines appeared healthy and flourishing, and were well laden with fruit; it occurred to me, however, that the number of clusters was too great for the aliment which had been furnished to the border. There is much danger of over-cropping. It is to be remembered, that these vines were put out two years ago in April last, in a *very rich border*,—60 barrels of bone dust, and 40 tons of stable manure, having been used in its construction. The first summer's growth was astonishing; perhaps unparalleled in this country. It is in vain to expect a similar growth the following season, or this present season, with ordinary rates of manuring. If one half the quantity of bone dust and stable manure had been used, and a suitable lot of whole bones, or cattle's feet, or slaughter house offal, had been added, the fertility of the border would have been more permanent at less cost; and the gardener on the Island would have been, probably, quite as well satisfied at the present moment. A good layer of compost, in early spring, and a semi-monthly treatment of soap suds, will be of great importance to the vines next year. The vine is truly "a gross feeder."

One word about our friend's mode of pruning. Is there not danger that the spurs or branches, as they put forth horizontally, will meet and interlock with each other? and in such a case, will not the house become too much shaded? It is the habit of some varieties to push their horizontals many inches, before the fruit is located, as in the White Muscat of Alexandria. It must, therefore, be stopped at the first bud beyond the cluster, or the allotted space will be all used up. The operator may, perhaps, flatter himself that he shall keep the fruits "at home" in future, because he has a bud on the lateral, near the main stock, for fruiting next year. But never fear a want of buds, where the vine is strong and ripe, and has laid in a good supply of organizable matter. Germs will show themselves; "nature will out," and I should like to see the experimentalist who should propose to prevent fruiting by cutting all the spurs smoothly and closely to the main stem. The preserving of an open space between the vines, in a span roof house, may not be so essential; but it is quite important in the "lean-to" graperies, so that the sunlight may be reflected from the back wall.

By a recent and careful observation, at all those points, where I have had an opportunity, I have discovered my own errors, at least in part. At the outset I failed in the border. It was deep enough and suitably drained, but organic manures were furnished too

parsimoniously. There was not enough to furnish the phosphates, or a copious disengagement of nitrogen. Professor NORTON'S lectures in Albany, were exceedingly useful to me. Another mistake was to allow the sash to remain with bad joints, so that a uniform temperature could not be maintained. After fitting the sash, I found a great difference. In the early part of the season, the house has been kept closed, a larger part of the day than in previous years, and with decided advantage. True, Mr. DOWNING says, "Plenty of sunlight, plenty of air, and plenty of moisture," are his fundamental principles for grape culture. But if the house is open too much for air, the caloric escapes, and the moisture evaporates. I have never kept mine so close before, and never before had such growth of wood, or such perfection of fruit. Being too much shaded by some forest trees, behind which the sun retires at 3 o'clock, I have laid some old sash on the border out side, and so have obtained a temperature suited to the wants of the roots. Under the glass, the vapor is also condensed, and the roots find a grateful moisture, to the very surface of the ground. The border is mulched with tan.

With these comments, which appear sufficiently egotistical, I conclude, observing that if others can derive any, even the smallest profit, from these speculations, I shall be satisfied. And I hope also, to offer reasons, at a future time, why many others would do well to commence the building of a vinery. A. MESSER.

Geneva, Ontario co., N. Y.

FRUITS vs. INTEMPERANCE.

BY JAMES RICHARDSON, JR.

THE grand mission of the horticulturist, in subduing, cultivating, and embellishing the earth,—of rendering the outward world a Paradise,—a garden of beauty and delight, (as the word Paradise literally imports,) is as yet but little understood and appreciated in all its length, and breadth, and glory, by even its most distinguished apostles and earnest and enthusiastic devotees. For it shall be his office in the coming age, not only to transform the face of nature, and through the hints and suggestions everywhere given him by the Divine Creator, to deduce order and beauty from the surrounding chaos, but to have a very important and powerful influence upon the life and culture, the health and happiness of man The civilization of man, and that of the earth indeed, always go hand in hand, and each acts upon, and advances the other. By the greater abundance and improvement of grains and vegetables, and especially by the increase of various and luscious fruits, a very striking change is to be made for the better, in the manner of human living, in the regimen and nourishment of the human body, and hence, in the purity, activity and beautiful development of mind and soul. How much more poetical, how much more refined and elevated, as well as beautiful and exhilirating, is a table glowing with the various melting and luscious fruits in their season—the dewy, delicious strawberry, the fragrant raspberry, the ruby cherry, the tempting paradisean nectar of peach and apricot, plum and pear, and the glorious clusters of the rich and juicy grape, with the cooling and refreshing waters of cantelope and melon, accompanied by simple farinaceous articles of diet, than a board covered with the flesh of beasts, however delicately cooked, and with various spiced, unnatural, and unholy mixtures of cake, pastry, &c. Think of father Adam slaughtering an ox in Paradise, or the delicate fingers of his fair and gentle partner,

dripping with the fat of a roast spare-rib, as her divine features become scorched and empurpled over a blazing fire.

We believe, most fully, from personal experience, as well as observation, that an abundant use of fruits has a strikingly delightful and elevating influence upon the animal spirits, as well as upon the mind and soul; that the constant habit of employing fruits will cure many diseases, and have a most beneficial effect upon the health of the individual, and the race, and prove, next to air and water, the greatest of all preventive medicaments. Indeed, as for ourselves personally, through spring and summer, autumn and winter, our breakfast is made almost exclusively of fruits. These we will have, and using no other luxury, we think we have a right to use them at any cost. At the same time, we feel it to be a high and holy duty, which we owe to the race, *to do all in our power to render fruit so abundant and cheap, as to fall within the means of our poorest brother*, and gladden, with its nutritious and exhilarating juices, every child in the land. We do not labor merely that this princely merchant, and that lordly nabob, should have his table loaded with choice "specimens;" but that every man, woman, and child, month in and month out, should revel in these delicious and healthful luxuries, till they become the cheapest of common necessities. And let the true friend of our noble art but do his duty, and this can, and it will be accomplished.

We even go so far as to believe, that such a blessed consummation would do more than aught beside to banish dram-drinking, wine-bibbing, and intemperance, from the land. For these habits are to be attributed, in the main, to a craving for the sparkling and exhilarating juices, the grateful and healthful acids contained in fruits. And the truth of this statement will be evident, if we consider that principally, from the juices of fruits, come all our various wines, exhilarating liquors, and intoxicating beverages. It was one of the methods early taken to lengthen out and perpetuate the season of fruitage. The less abundant of fruits were dried in ovens, or hung up in the solar rays, and the juices were expressed from the more prolific and plentiful varieties. As from the apple, cider; from the pear, perry; from the grape, wine and brandy; and hence, elder wine, currant wine, &c. At first, indeed, this method was employed only on a limited scale, in the very season of fruits, and the juicy clusters of the grape were pressed into the crystal or golden goblet, as we now squeeze the orange and the lemon for our delicious orangeade, or the cooling sherbet of lemons. As we read in holy writ, "I took the grapes and pressed them into Pharaoh's cup, and gave the cup into Pharaoh's hand," (Genesis XI. 11.) Gentlemen, indeed, in the constant habit of employing wine and liquors, say to us, "Oh! with such fruits as these, I should not care for wine, and should soon give up all relish for drinking." Let us make the various delicious fruits so plentiful, as to be within the reach of every man, even the poorest and the humblest, and we shall do more for the cause of temperance, and truly *good*-living, than all the Maine liquor laws and temperance lecturers in the world; for we shall thus destroy utterly, the the corrupted and perverted tastes of men, and restore them to the original beautiful and wholesome simplicity of nature.

JAMES RICHARDSON, JR.

Greenfield, Mass., July 28, 1852.

ON THE CULTURE OF THE NARCISSUS.

BY JUVENIS.

Mr. Editor—The Narcissus is a flower the cultivation of which is neglected more than it ought to be, and I am desirous of calling the attention of your readers to some of the best species. With this object I have sketched a few of them, and if you can find room for them in one of your numbers, before the fall, I doubt not, that amongst your numerous readers, many will try for once a few Narcissi, who have never grown them before; and I promise them a gratification if they do so, that will induce them to repeat the experiment.

In the sketch which I send, the flower with reflexed petals on the left hand of the group at top, is N. Cernuus. Immediately below it are three flowers of N. Jonquillus, (the common Jonquil.) In the centre of the group is N. Albicans with its beautiful bell shaped cup, and below it N. Conspicuus. On the right hand of the sketch, is the magnificent N. Trewianus, more generally known by the gardener's name, "Bazelman Major," (one of the polyanthus varieties,) and below it is the elegant N. Poeticus.

For culture in pots, the Polyanthus species is the most showy, and several of the best and most distinct are always to be met with in the annual catalogues of our seed stores; and of them, the varieties named Grand Monarch, Grand Primo Citronier, Soleil D'or, and the Bazelman Major, are the best worth cultivation. All these sorts do admirably well in pots. The bulbs of all the Polyanthus tribe of Narcissi, for pot culture, should be large, none less, and some exceeding in size a fine Hyacinth root. Although almost any soil will serve to grow them tolerably well, yet, of course, they are materially benefitted by one specially adapted to their nature.

I have grown them with uniform success in a compost, consisting of rich loam with an equal quantity of old hot-bed manure, and about a sixth in bulk of white, fine sand, mixed together. The pots in which they are grown should bear reference to the size of the bulbs. There should be at least an inch clear space between the diameter of the bulbs and the sides of the pot. In October or November (the earlier the better) plant the bulbs in the above compost, taking care that it is well pressed down round the bulb, so as to have the latter *firmly* fixed in the pot. When all are potted, place the pots in a frame or in a cellar, and cover them over with any dry material, such as coal ashes, sand, or even loam, for I have used each with equal success; but the last named must not be used if your pots are in a situation exposed to wet, which they ought not to be. This covering should be of the depth of at least eight to twelve inches; because when the bulbs begin to put forth their roots, the force exerted by them is much greater than would be supposed possible by those unacquainted with the fact; and unless the superincumbent weight is considerable, the bulbs will be completely raised out of their pots by the reaction upon the bulb of the force exerted by the roots in pushing themselves through the soil. The pots should remain in this situation for at least six weeks or two months, during which time they are in the most favorable condition they can be for forming roots; and they may be so left with advantage until it is wished to bring them forward into bloom. About the middle of December, this operation may commence, though to have a fine head of bloom, it is desirable to delay it a month longer, as the Narcissus will not bear such early forcing as will the Hyacinth; I mean to produce a proportionately good flower. Whenever it is determined to commence forcing, the pots must be taken from under their covering with care, (for the stem will have shot up from one to three or four inches, into the

ANDERSON

ashes or other covering,) the outsides of the pots washed with a sponge, and they may then be placed in a moderately warm hot-bed or in a green-house or parlor. I have grown them as fine in a room as ever I did in my green-house. Of course the period that will elapse between their removal from their first situation to the time of the expansion of their bloom will depend upon the degree of heat to which they are subjected. The more gradually they are brought forward the finer will be the bloom, and in any event they should not be, for the first fortnight, in a higher temperature than from 55° to 60° Fahrenheit; which will be quite sufficient to bloom them in perfection; but if it be desired to hasten the bloom, the temperature may be increased after a fortnight or three weeks, gradually, by 10° or 15°, which will expedite their progress. After the pots are taken from under their first covering, they must be moderately watered occasionally, so as to keep the earth moist, but by no means to an extent which will render it of the consistence of wet mud, which I have sometimes found my lady friends think essential to the well doing of their bulbs. When the bloom buds have begun to expand, the quantity of water may be increased; this if accompanied by a slight increase also in temperature, for two or three days, will add to the size of the bloom.

The Polyanthus Narcissus also grows well on water, in Hyacinth glasses. Its treatment is precisely like the Hyacinth. When first placed in the glass, the water should not be allowed to *touch* the bottom of the bulb, but the glass should be filled to within half an inch of it. The reason for this is, that if the bottom of the bulb is permitted to rest in the water, the outside coats of it become decomposed by saturation, and a slimy result is formed, which putrefies, and decay of the bulb is frequently the consequence. Until roots are protruded, it is best to place the glasses in a dark closet, as it is found to be a law in vegetable physiology, that darkness is favorable to the formation of healthy roots, which are produced under such circumstances, also more speedily than when exposed to the influence of light.

There is another species of Narcissus which should always be grown, and which may generally be found in the early autumn, in the seed stores, before the other sorts arrive. It is called the Double Roman Narcissus; and another from the neighborhood of Mount Vesuvius, N. Papyraceus, (the paper white of the shops.) The Double Roman and the Paper White, will both bear forcing much better than the other kinds, their season of blooming in their natural habitat, being from one to two months earlier. I have for years grown this in my parlor only, and got it into bloom by the first week in January, and any one may do the same by simply following the plan I have given above, only that to have them in bloom thus early, they cannot be allowed more than a month or so to remain under ashes—for you can seldom buy the bulbs until the middle of October, and in the parlor where my family sit, (with a fire of course, at that time of year,) they take six weeks to bloom from the time they are brought in. No bulb can be got to bloom in anything like the same perfection, so early in the year as this. Indeed, I have several times had them with some flowers open on the 25th December.

The scent of the Double Roman is strong, and to many very agreeable; but in odor all must yield the palm to the delicious Jonquil. The bulbs of the Jonquil are small, and three or four should be placed in a pot of the same size as is used for the larger varieties. The pot culture of the Jonquils is precisely the same.

No object amongst our early spring flowers, is more beautiful than the Narcissus, for the flower garden. Any of the varieties may be planted in the open border in the fall of the year; they should be placed deep enough in the ground for the bulbs to be covered four inches, and their situation should be a short distance from the edge of the border,

with Crocus or Snowdrops, or some low growing plants in the foreground. It is not necessary to lift the bulbs every year, but once in three years they will require it, to separate the offsets. With regard to soil, they will thrive very well in any tolerably good garden ground; the richer it is, the larger and more numerous will be the flowers, and they will form a most interesting contrast to the Hyacinths, which should be planted alternately with them. The effect thus produced is more pleasing to the eye, than when they are placed separately in beds, as is sometimes done.

When out of bloom, (if grown in pots) the bulbs should be turned out, and planted in the garden in a newly dug piece of ground, placing them a foot apart every way; and in a situation where they get but little sun; and if well watered, daily, for two or three weeks, *until the ends of the leaves begin to turn yellow*, (from which time no more water must be given,) they will bloom again the following year. They should be taken up in the end of July, and then dried in the sun, with a sheet of paper or cloth thrown over them to prevent their drying too rapidly. I have grown the same bulbs with very tolerable success for several successive years.

THE FERTILE CURRANT OF PALNAU,

BY BAPTISTE DESPORTES, ANGERS, FRANCE.

It is generally known that France is the country, where, thanks to the climate and the nature of her soil, fruit attains the highest degree of perfection; and where, for the same reason, the study of them has become both easy and attractive. And in this country thus favored by nature, some cities, amongst which I mention two, Tours and Angers, have distinguished themselves particularly, by their superior culture of them. In the first named city, our respected friend, Dr. Bretonneau, who is equally eminent for his studies of plants as of natural history, has raised from seed, some years ago, a new variety of currants, to which he has given the name of "*Groseillier fertile de Palnau*"—Palnau being the name of his garden in which this variety has been raised.

This currant tree, having been introduced into the garden of Mr. Andre Leroy, has been there rapidly propagated, with a success proportioned to its merits, and it can now be distributed in great quantities to agriculturists. This "Fertile Currant of Palnau," was raised from the natural seed of the common currant. The distinguishing type of it is its early flowering, and in particular, the enormous abundance of its clusters. The disposition of its branches is also different; they are generally less spreading, and much larger than the ordinary currant. The leaves are slightly whitish, with deep lobes obtusely indented. The petioles are hairy at the base. The fruit is red, and, as in all currants, slightly acid—but less so than the common species; its perfume and flavor render it very agreeable as a dessert fruit. For jellies, syrups, and preserves, it yields to none of the most esteemed varieties. It has the advantage of keeping well on the bush until the first frosts of the season, without its being necessary to cover it.

I will now give you a description of a branch taken from one of a number of specimens of this currant, in the garden of Dr. Bretonneau, which will, much better than anything I can say, give an exact idea of the fertility and product of this valuable acquisition.

The currants occupy on the branch, a length of sixteen inches. They hang vertically,

and very close, so as to cover the stem entirely. Notwithstanding their growing so closely, they nevertheless, are perfectly developed. Each of the bunches, and there were one hundred and fifty of them, being three inches in length, carrying ten to fifteen berries, so that taking twelve for each as an average, gives one thousand eight hundred berries. These berries were about one inch and a quarter in circumference; a few of them only, which were placed towards the end of the bunches, not being more than an inch. They are certainly not so large as the cherry currant, but they are much larger than the common kind. The total weight of these currants was a pound and a half. The bush that bore this branch, although a young one, had at least a dozen branches equally loaded with fruit, and some others which were also well covered, although not to the same extent.

You can judge by this of the abundance of the crop, and how great the advantage would be to adopt this variety in gardens, instead of the common sort. I am certain that I do not over estimate the produce, at ten times greater than the ordinary kind.

These currant trees are pruned in the vase or goblet shape, upon which a certain quantity of permanent, or "mother" branches are left, at equal distances. Upon these permanent branches, secondary ones are thrown out, the increase of which is encouraged by pinching off the ends of those first produced, so as to have the secondary branches at distances of three or four inches apart on the permanent stem. These secondary branches are all stopped at the length of one and a half or two inches. From the base of these last named, other branches will grow out, which are treated in the same manner. At the intersection of all these ramifications, a considerable quantity of buds will be formed, which will not fail to flower, and to produce immense quantities of fruit. Each one of the small branches is only preserved three years, after which they are cut back to the place from whence they started. This process, at once simple as it is natural, adds still more to the natural fertility of this variety.

I regret that the distance that separates us, does not permit me to send you one of these branches loaded with fruit. I should have been very happy to let you see all the extraordinary merits of this remarkable species.

Wishing, nevertheless, to give you an idea of it, I send to the Pomological Congress at Philadelphia, a drawing of one of these branches, which I have had painted. I have also added drawings of some other different new fruits, that I wish to make known in America.

BAPTISTE DESPORTES.

Angers, France, July 13, 1852.

THE RESULTS OF MANURE ON A PEAR TREE.—In a late number of Moore's New-Yorker, Linus Cone, of Oakland Co., Michigan, informs us of an interesting experiment with high manuring. Twenty-five years ago, he planted a Summer Bonchretien pear tree, the culture of which, after a few years, was neglected. The fruit at first was fine, specimens often weighing nearly a pound each, but afterwards grew gradually smaller, till nearly worthless. The tree was then well pruned, washed with lye, and the ground well spaded, with no improvement. Last spring twenty bushels of manure from a blacksmith shop, consisting of dung, parings of hoofs, cinders, &c., was spread and dug in. Twenty bushels of fine, high flavored fruit, was the result, the same season.

Tributes to the Memory of Mr. Downing.

ODE ON THE DEATH OF A. J. DOWNING.

BY A LADY OF MARYLAND.

Mourn, all ye mountain rills, whose crystal flow
By pebbly margins, soothes the summer gale!
Mourn all ye hills,
Where cedars wave and tall pines darkly throw,
From the grey rocks, their shadows down the vale.
And all ye gardens, where the cultured flowers
Of various climes perfume the vernal air,
Mourn ye! Mourn all ye gentle showers!
Ye evening dews
Drop diamond tears in morning's early hours,
Sparkling profuse,
From lids yet heavy with the damps of night.

His step, which gave delight
To the curved walk and tasteful lawn, no more
Treads the crisped, gravel'd shore,
Bord'ring the grassy sward, with easy slope.
The eye, the hand, the pen, are silent all!
Taste mourns the graceful spirit that portray'd
Her lines of beauty in each varied shade,
Each slope and fall,
Each "long-withdrawing vale"
And ivied wall,
Where wild birds build and tell the am'rous tale.
Ye drooping elms, and cedars dark, which sweep
With pendant boughs the grassy verdure, deep,
Do ye not hear *Her* weep?

Downing! Fair nature was to thee
A glorious Deity:
Something akin to Godliness, and Love,
And Art! ——to build her altars 'neath the skies,
A Nymph of Paradise.

O tuneful streams and lawns of velvet green,
With clust'ring shrubs and bow'ring vines between;
Dark tow'ring firs, and Lebanon's own tree,
As once o'er sacred hills, droop solemnly!
The name of Downing whisper as ye wave;
And O ye winds! Blow lightly o'er his grave!

Each cot and stately hall, each tiny bower,
And each fair girl who loves to rear a flower;
Each soul who seeks in Nature or in Art,
To bear an humble or a lofty part,
Put on the Cypress! Shroud in mourning weeds
The casements dark, for Rural Beauty bleeds!
And ye neglected shades—our forest wealth,
No longer wearing glorious hues by stealth,
Come boldly forth!—assert your noblest powers!
Give us your stately forms—your brilliant flowers,
But while you shade America's young homes,
When brilliant autumn paints each fading leaf,
Give to the rust'ling wind as forth it roams,
A soft funereal tone of tender grief.

Artist and Scholar! Thou art fallen asleep,
In thy fair prime,
Where the blue waters of the Hudson sweep.
Alas! no opening bud or swelling fruit can charm:
Nor votive rhyme
Light the cold eye, the silent pulses warm.
We mingle tear with tear
With mourning friends around thy early bier,
And lay thy favorite rose upon thy breast.
Sweet be thy rest!
And may that world where trees immortal grow,
Around thy spirit throw
Their soft refreshing shades, amidst the blest!

Weverton, Maryland, Aug. 17. J. C. W.

Massachusetts Hort. Society.

At a meeting of the Massachusetts Horticultural Society, held Saturday, Aug. 7, 1852, the following preamble and resolutions reported by a committee chosen at a previous meeting, were unanimously passed, and placed on the records of the Society:

The Massachusetts Horticultural Society have been startled and pained by the intelligence of the sudden death of their co-laborer and friend, A. J. Downing, of Newburgh, N. Y.—a passenger in the ill-fated steamer Henry Clay.

Eminent alike as a Horticulturist, a Landscape Gardener, and an Architect, Mr. Downing has, in each character, made his mark upon the age. Where the grateful gardener plucks the rich fruit from the laden bough, there is his name known. Where taste has turned the unsightly pasture into a lovely lawn, and adorned it with gems of the garden and the green wood, there are his labors felt.

The humble cot he has made a picture of beauty, and the elegant mansion, reared by his genius, fills and satisfies the most nicely critical eye.

But he has gone! In a moment, as it were, and without warning, he has been called to pass the gloomy vale of death, and now rests—

"Where rivers of pleasure flow over bright plains
And the noon-tide of glory eternally reigns."

In view of this unexpected and terrible stroke, by which this Society is deprived of one of its members, and the cause of Horticulture of an eminent and earnest advocate,

Your committee respectfully submit the following Resolves:

Resolved, That the members of the Massachusetts Horticultural Society greatly deplore the loss of their associate, who has done so much to advance and extend a taste for the kindred arts of Agriculture, Horticulture, Landscape Gardening, and Architecture.

Resolved, That in the death of the late Mr. Downing, Horticulture and Pomological Science

have sustained a severe loss; distinguished alike for his private worth and public usefulness, and devoted to the pursuits of Horticulture, Landscape Gardening, and all that pertains to the advancement of our Rural Homes, his memory will be cherished, and his decease sincerely lamented.

Resolved, That we tender the sympathies of the Society to the family, in their afflicting bereavement, and that the Corresponding Secretary be directed to communicate the above resolutions to his bereaved family.

Further Resolved, That the Hon. Marshall P. Wilder be solicited to deliver an Eulogy on the Life and Character of the late A. J. Downing, Esq., at such time and place as the Society may hereafter designate. For the Committee.

Sam'l Walker, Chairman.

Pennsylvania Horticultural Society.

At the meeting of this society, August 17, the following appropriate resolutions were unanimously adopted:

Resolved, That we deeply deplore the afflictive providence which involved, in the destruction of the Henry Clay and the tragical loss of many valuable lives, the removal of our esteemed fellow member, A. J. Downing, of Newburgh, in the pride of manhood, and in the full maturity of his powers, from the scene of his useful and honorable exertions, at a time when his services were so universally and highly appreciated, and when his efforts in life were producing throughout the land, the beneficent and beautiful results for which he had so long labored, and over which his benevolent spirit would have so generously rejoiced.

Resolved, That we regard as a national bereavement and affliction, the loss of one whose powers were so diligently and successfully dedicated to the purest and best interests of his race and his country; that the deceased was endowed by nature with a vigorous intellect, which was elevated by liberal and practical cultivation, and directed by an expanded philanthropy and a glowing love of nature, to the promotion of those pursuits connected with rural life and rural happiness, which, while they contribute to the solid power and prosperity of a people, refine and elevate their tastes and enjoyments; that the country will hold in grateful and enduring remembrance his valuable and popular contributions to the literature of horticulture—his aid in the promotion of Landscape Gardening—in the improvement of the "Fruits and Fruit trees of America," and of Cottage Residences, and his able and assiduous labors for the general advancement of Pomology and rural economy; that his efforts in these branches have produced an improvement which is perceptible in the aspect of many sections of our country; and that his sudden and melancholy death is a bereavement which will be long and deeply deplored, far beyond the affectionate and afflicted circle of which he was the ornament and the pride.

Resolved, That as the loss of A. J. Downing is a national calamity, calling for an appropriate national commemoration, we cordially approve of the action of the President of the American Pomological Congress, in inviting the Hon. Marshall P. Wilder, an intimate friend of the deceased, to deliver at the approaching session of the Congress in Philadelphia, on the 13th proximo, an Eulogy on the life, character, and virtues of our lamented fellow member.

Resolved, That we sincerely condole with his bereaved family upon this afflictive dispensation of an inscrutable Providence; and that as a manifestation of our respect and sympathy, the Secretary be directed to transmit to them a copy of the foregoing resolutions. T. P. James, Rec. Sec'y.

New-York Hort. Society.

At a regular meeting of the New-York Horticultural Society, held at Stuyvesant Institute, August 2, 1852, after some appropriate remarks by Mr. Peter B. Mead, on Mr. Downing's melancholy fate, a committee appointed for that purpose reported the following Preamble and Resolutions, which were unanimously adopted:

Whereas, This Society, by a melancholy casualty, has been suddenly deprived of a valuable and esteemed member;

And whereas, It becomes our duty to pay a proper tribute to the memory of one whose services in the cause of Horticulture have given him a lasting claim to our gratitude;

Be it therefore Resolved, That in the sudden death of our late associate, A. J. Downing, Esq., we recognize the hand of an overruling Providence, and that we deeply deplore the loss sustained by his family, by his calamitous death, and hereby tender our sympathies to them in their affliction.

Be it further Resolved, That, in common with all who take pleasure in horticultural pursuits, we feel that we have sustained no common loss in the death of one so eminent in his profession, and whose labors in Rural Architecture and Landscape Gardening, will remain as enduring monuments of his judgment and taste.

On motion, it was

Resolved, That the Corresponing Secretary be requested to forward these Resolutions to Mrs. Downing, and also furnish copies of the same for publication in the Horticultural Magazines.

Pittsburgh Hort. Society.

Pittsburgh, Aug. 7, 1852.

L. Tucker, Esq.—Below is a copy of resolutions passed by the Board of Managers of the Pittsburgh Horticultural Society, at their regular monthly meeting on the 4th instant. A. B. McQuewan, Cor. Secretary.

Resolved, That this Board has heard with profound regret, of the melancholy death of A. J. Downing, Esq., by the burning of the steamer Henry Clay—That we regard his death as a National loss to the cause of Horticulture,

Landscape Gardening, and other Rural Sciences, not soon, we fear, to be filled up—his life and brilliant talents having been devoted to the advancement of his favorite pursuits.

Resolved, That this resolution be published in our daily papers, and a copy of the same be sent to the Editor of the Horticulturist by our Corresponding Secretary.

W. H. Williams, Prest. Protem.
J. M. Kain, Sec'y.

Genesee Valley Hort. Society.

At a special meeting of the Horticultural Society of the Valley of the Genesee, held in the city of Rochester, August 12, 1852, the President, on calling the meeting to order, stated that he had called the members together at the suggestion of others, and in accordance with his own feelings, to express in some suitable manner the feelings of the members in regard to the sudden and melancholy death of A. J. Downing, who had been for many years an honorary member of this Society.

On motion of M. G. Warner, a committee of five were appointed to prepare resolutions for the consideration of the meeting.

The President appointed M. G. Warner, Jas. H. Watts, H. E. Hooker, Geo. Ellwanger and A. Frost.

The Committee, through their Chairman, reported the following Preamble and Resolutions—which are unanimously adopted:

Whereas, in the death of A. J. Downing, American Horticulture has lost its noble and gifted standard bearer, and society one of its most amiable, accomplished and useful members—who has done more than any other to awaken among the American people an appreciation of their country's resources, and to cultivate and diffuse a love for the beautiful in nature and art—whose writings, brilliant and powerful in style, and truly American in sentiment, have given us a Horticultural Literature which commands the admiration of the world,—therefore,

Resolved, That we regard his loss as one of the greatest that could in this day befall the American people in the death of any one man—that we deeply sympathize with his afflicted friends and relatives, truly "mourning with those who mourn" for the loved and lost.

Resolved, That though Mr. Downing is no more, and his voice is hushed in death, yet he still speaketh—his works will live after him, and his influence be felt while correct taste has a disciple or a home in the earth.

Resolved, That we recommend the Horticulcultural Societies of this country to take some some united action, to testify in a suitable manner their regard for the memory of Mr. Downing; and that a committee of three be appointed to correspond with other Societies on the subject.

P. Barry, L. Wetherell and James H. Watts, were appointed a committee in accordance with the resolution.

Resolved, That the proceedings of this meeting be furnished the various Horticultural papers, with a request to publish the same, and a copy thereof be forwarded by the President of the Society to the family of the deceased.

James Vick, Jr., Sec. P. Barry, Prest.

Columbus (Ohio) Hort. Society.

Whereas, news has been received of the loss of the steamer Henry Clay, by fire, on the Hudson, and among the lost we find the name of A. J. Downing, of Newburgh, the editor of the Horticulturist; therefore, be it

Resolved, That while we deplore the loss of so many lives, and sympathise with those bereaved, we learn with feelings of sincere regret and profound grief, of the death of the distinguished horticulturist, A. J. Downing. That while horticulture engages the attention, and enlists the feelings of many, none have surpassed the deceased in intelligence, enthusiasm, industry and devotion, in all things that relate to "rural art and rural taste," none have left more enduring or more beautiful monuments of their labors, than he. Death has surprised him in the midst of his usefulness and success, and just as his cultivated taste was being fully appreciated by the nation. Who can fill his place?

Resolved, That as an honorary member of our Society, we feel that we have a lost a brother, whose writings and teachings have been our pleasure and our guide, and whose memory we will cherish as one worthy our love and esteem.

Resolved, That in this bereavement, we sympathise with his family, and the friends of horticulture everywhere, and as a token of our esteem, we will place these resolves on our minutes, and forward them to be published in the journal which he so ably edited.

[*From the N. Y. Tribune.*]

Among the victims by the destruction of the Henry Clay, there is none whom the country could so little afford to lose, or whose services to the community could so little be replaced, as Mr. Downing of Newburgh. A man of genius and of high culture, thoroughly disciplined in his profession by long study and observation in Europe, with taste refined and judgment true enough to feel the deficiencies and to know the needs of our domestic, and especially of our rural architecture; still in the prime of life, and exercising a wide influence by his practical labors as well as by his life, he is snatched from a sphere of high and beautiful utility, and a successor we cannot hope to find. What Mr. Downing had done and was doing to improve the fashion of our dwellings, hardly surpassed in value his contributions, theoretical and practical, to the kindred art of landscape gardening. Under his directing hands, the grounds at the Smithsonian Institute at Washington, were being transformed into models of beauty in their kind, and the grounds about many private

mansions also bear testimony to the same taste, the same wise sense of beauty and fitness. As a writer, Mr. Downing is remarkable for a mixture of the strong sense, thorough understanding of his subject, and a genial originality. The cessation of his monthly essays in the Horticulturist, will leave a permanent blank in the history of the domestic arts. While he drew his materials from the most varied culture, he was always, and in the most frank and manly way, an American. His chief aim was to refine the taste, and elevate the social life and habits of his countrymen, to something like the ideal proper to freemen An artist, a scholar, and a gentleman, we deplore his untimely loss, and a wide circle of acquaintances who with us recall his eminent social, as well as public qualities, will join with us in this tribute to his memory.

[*From the New York Evening Post*]

Mr. DOWNING first became known by a work on Landscape Gardening, in which he exhibited great taste and enthusiasm. It was nearly the first book of any pretension to direct our countrymen to ornamental gardening and rural architecture, and it had a good effect in refining and cultivating the public taste. Not long afterwards he published a smaller work on Cottage Residences, which also attained a wide circulation, and exercised a healthful influence. He then prepared a work on the Fruits and Fruit Trees of America, in which his extensive horticultural studies and experience were applied. He edited also, a small book etitled Hints on Architecture, but of late years his energies were principally exerted in the Horticulturist, a monthly magazine of high character, devoted to Horticulture, Pomology, Landscape Gardening, Botany, and Rural Economy. Mr. DOWNING's contributions were a chief attraction of this periodical, which through his efforts, had become unusually successful.

These publications of Mr. DOWNING, more than any other agency, had worked a change in our style of building, and created a general improvement in taste. He was commissioned, by a large number of gentlemen about to construct private residences, to prepare the designs and lay out the grounds. The evidence of his fine professional accomplishments now meet us in all parts of the country, and his loss is one that will be felt far beyond the bereaved circle of which he was the ornament and pride.

At the time of his death, Mr. DOWNING was employed by the government at Washington in laying out the public grounds in front of the Capitol. He had not yet completed his plans, but such alterations as had been already made were universally admitted to be a great improvement to the metropolis, and promised the most beautiful results. Mr. DOWNING had determined to expend the whole resources of his art, under the guidance of his exquisite taste, in rendering these national gardens worthy of their name. Whether he has left any instructions or drawings, to enable others to carry out his designs, we cannot say.

[*From the Newburgh Gazette.*]

We have had a conversation with Miss Amelia A. Bailey, in relation to the last moments of Mr. DOWNING. She assigns the preservation of her life to the advice given her by Mr. D., who, before she jumped overboard, urged upon her presence of mind, and directed her how to avoid strangulation as she sank into the watery element. They were on the stern of the boat together, whence one after another were throwing themselves into the water as the fierce flames approached. She sprang into the water from an elevated point, and as she arose caught hold of the chain, fortunately within reach. There she sustained herself until a gentleman, arising for a moment from the same fearful grave of youth, manhood, and age, grasped the chain with a convulsive effort, that forced her to lose her hold. Miss B. finally clung to the braces (under the guards,) sustaining above the water with her feet, an elderly lady in whom the spark of life had almost expired, while another person clung to her waist until a boat arrived and rescued them. Miss B. informs us that the last she saw of Mr. Downing, he was struggling in the water with Mrs. Wadsworth clinging to his neck. She did not speak to him in the water, though she saw him, as stated above, sinking in the water a short distance from her. She says he was perfectly composed, and just before they parted on the deck, replied to her inquiry whether there was a prospect of being saved; 'I cannot say, there is danger,' or something to the same effect.

☞ A correspondent of the N. Y. Times writing from Newburgh, in reference to the disaster to the Henry Clay, says:

"This country has good cause to assail them, and pray most sincerely that just retribution may fall upon all who were in any way the cause of this thrilling and heart sickening calamity. Mr. DOWNING's loss cannot be made good by a thousand owners of steamboats. His death is a national loss. Mrs. De Wint, of Fishkill, was niece of the late John Quincy Adams, and Mr. DOWNING was her son-in-law. He undoubtedly lost his life in attempting to save a lady—Mrs. Wadsworth of New-Orleans, a very lovely woman—and who was under his charge. His wife escaped by being supported upon two chairs until she was rescued. Knowing that Mr. DOWNING was an excellent swimmer, she supposed he had been taken off by the Armenia, and gone to New-York, and it was not until the next day that she was told of his sad fate."

Domestic Notices.

CALYSTEGIA PUBESCENS.—This plant, a *double*, climbing rose convolvulus, continuing to flower through a large portion of summer, a perennial, and perfectly hardy, had much to recommend it, and may yet be continued in cultivation by those who admire variety. But, like the *Campanula trachelium*, introduced for ornament, it is likely to prove a very troublesome weed. We last year planted two or three fragments of the root of the Calystegia, an inch long, and as large as goose quills, which grew, and produced a profusion of flowers. But this spring we found them coming up over the whole surface within a circle of *ten feet*, whither, like the Canada thistle, their roots had extended. They were destroyed with the hoe; but in a short time they sprang up again, nearly covering the whole surface, with some extension of the circle. The soil is light; and they may not extend quite so rapidly in heavy soil.

THE MILAM APPLE.—This apple has obtained some celebrity at the west, and has been widely, though not abundantly cultivated. Its quality as given in the following extract from a letter of Dr. KENNICOTT, of Northern Illinois, agrees with specimens we have received from Cincinnati. "Perhaps I did not name a celebrated Indiana and Illinois apple, called "MILAM"—my brother and several neighbors have many trees of this *common* western variety—we have only *one*, and do not propagate it. This apple is barely "*good*," and is no great bearer *here*, whatever it may be elsewhere. I know a dozen trees 20 years old, which do not produce as much as one tree of the size ought to bear. And then we have certainly two, and perhaps more varieties under this name. All that can be said in favor of the Milam is that it is *not* a bad apple—is pretty, though small,—pleasant, but rather insipid—and where it produces well, as it is said to do at the south, and *no better can be had*, it should be cultivated."

APRICOTS AT THE EAST—CLIMATE OF PALESTINE.—Extract from a letter of Dr. J. THOMAS, dated *Smyrna, June* 17, 1852—"When I was at Cairo on the 6th of May, they had on the table at the hotel, *ripe apricots*; and we have found them at almost every important town that we have stopped at since. We found very fine ones in Palestine, but not finer, perhaps not so fine, as I have seen in western New-York." The letter adds, "The climate on the hills of Palestine seemed to me more delightful than anything I have ever experienced. ——— is quite American in his prejudices, but he said he had never breathed any air so pure, sweet, and exhilarating as that of the hills and valleys around Jerusalem. His health is so much improved that his friends would hardly know him."

CUCUMBERS.—We have often seen cucumbers in England, that measured twenty-three or four inches, and the flower on them, which is a *sine qua non* for exhibition with English amateurs. There are "Cucumber Societies" around London, the special object being the early production of this fruit. But recent improvements in the heating of forcing houses in that country, renders it easy to have them in plenty all through the winter, in every place where attention is given to a hot-house, and consequently the societies are now only the remains of times gone by, when the fight for a good cucumber in April, was winter's frost on one side, against plenty of good stable manure and careful gardening on the other. Market gardeners around London, grow cucumbers early in the year, on an extensive scale, in frames of many hundred feet in length, heated by hot water pipes running through them, upon which some faggots of wood are first laid, and the compost upon the latter. The faggots serve to distribute the heat equally *beneath* the soil in which the plants grow, and thus yards and yards of frames are heated by a pipe 3 or 4 inches in diameter, through which one small boiler and a moderate fire keeps up a circulation of the hot water.

A MONUMENT TO MR. DOWNING.—I have thought it would be fitting, could a suitable space of ground be had near where he has passed so many of his useful hours, midst his family and his garden, looking down upon the noble Hudson,

the river of his choice, in which might be planted the native trees of our country, and the ornamental ones of others—such as the numerous nurserymen, and all his admirers, would be glad to appropriate for the purpose, to be gathered from all localities possible—there to be planted around such enclosure, and about the resting place of one so admired when living, so lamented when dead. It would mark the spot of him who loved the soil—its cultivation—and its embellishment, and whose example all would like to imitate.

Such a plan carried out, to be superintended by judicious and qualified friends, would be in harmony with the character of him whose memory we would perpetuate. J. H. Watts. *Rochester, August* 12, 1852.

Roses.—Dear Sir: What is the proper time of year to propagate roses by cuttings, for pot growth. I have this year bought some of the best sorts I could find, and they are now planted out in my garden, and growing luxuriantly. When should they be potted again to bloom in the green-house next spring? and ought they to be cut or pruned. Yours, J. T.

[If you take off cuttings the last week in August, and plant them in light soil, under a north wall or fence, they will root and make nice little plants before winter. The end of October will be time enough to take up your Roses. Do not cut them when you pot them; but let them stand until the beginning of the year, when you may cut them back moderately, and bring them forward for bloom.] Ed.

Ravages of the Curculio Prevented.—The accompanying box will show evidence for itself, that I have for the second year, found means of arresting the fearful progress of the Curculio, which is by syringing the trees after the fall of the blossom, with a mixture of white-wash and flour of sulphur, in the proportion of 18 double handsfull of sulpher to a barrel of tolerably thick white-wash, made of unslaked lime. The sediment of this mixture will answer for a second and third barrel, merely filled with water, and well stirred.

I applied the above three times a week for four weeks, and have met with great success, having been obliged to prop the limbs to sustain the weight of the fruit.

These trees are ten years old, and have blossomed every spring, but have never until last year, ripened any fruit.

The specimens I send you are Bolmar's Washington, and you will observe upon some of them, the marks of that little infamous Turk, which are nicely healed over, leaving the crescent to light up those who may have doubts that they are the production of a Curculio district. Syringe well, and although the fruit may be stung, it will come to perfection.

I am glad to find that Mr. Stokes has also been successful in raising this most delicious fruit, and his idea of coloring the whitewash is a good one, as it does away with the glaring effect given by the lime.

I have doubts of the practicability of using a rose upon the tin garden pump, as it will soon stop up with particles of lime, and become useless. I prefer the lip which generally comes with these pumps. This may be bent in such a manner as to flatten the stream as it passes out the spout, and thus disperse it over the tree. I did not notice that any of the fruit withered or turned yellow, as spoken of by Mr. Stokes—of course there were some, as is the case in the best plum districts, that decayed and fell from the trees, making room for those that are left to have a chance to swell. Thos. W. Ludlow, Jr. *Yonkers, Westchester Co., N. Y.*

Note to the Article on Evergreens, June No.—Arbor Vitæs, to give the very finest effect, and make a thick, impervious mass of verdure, should have their lower branches growing out from very near the roots; and these trailing branches should be partially buried in the earth, when they will strike down new roots, and throw up shoots; each branch thus buried, forming as it were, a separate tree.

If there are no branches trailing on the ground, those nearest the earth may be bent down and pinned into the earth with stout forked sticks, where they will soon root, if kept mulched and moist. No trimming or cutting in can make the tree so thick and impervious as this method, or give it so fine a pyramidal form. A seedling Arbor Vitæ, comparatively new, called the Warrenia, is much stouter in its habit, and thicker in its growth, owing to its much shorter joints than our native tree, some fine large plants of which we have receiv-

ed from JOHN J. STIMSON, Esq., a distinguished amateur of horticulture in Providence, R. I.

The true method of setting hemlocks to have them form a thick impenetrable mass of beautiful foliage, is to plant them in clumps, or hills, with three to five plants in a hill, each plant from a half foot to a foot and a half apart. Set in this way, each tree throws its branches outward to the light and air, and thus makes a very dense thicket of green. We were indebted for this hint to IRA CLEVELAND, Esq., a lawyer of Dedham, and Secretary of the Norfolk Insurance Company; a gentleman of great taste in architecture and landscape gardening, who will show any one interested, some of the finest specimens of hemlocks grown in this way, eye ever beheld, fully equal in beauty to any exotic evergreen known. Heading in the tree nearly down to the roots, will give much the same growth and effect, though the former method is much preferable.

The American Yew may be trained so as to make a low hedge, or a single oval, or pyramidal, of the most rare and ivied tint of green, which is rendered still more striking, late in the season, by the contrast of its brilliant scarlet berries.

The mulching we employ for evergreens, viz: fine hub chips, spent tan, or common chips, and chip dust—forms the very best manure that evergreens can have. JAMES RICHARDSON, JR.

STRAWBERRY CULTURE IN THE VICINITY AND IN ROCHESTER, N. Y.—Very much attention has been given by fruit growers in this vicinity to the culture of the fine fruit, the *Strawberry*, and our markets are abundantly supplied with the best kinds. A careful comparison of select varieties for *flavor and productiveness*, has resulted in the highest commendation of "Burr's New Pine," as the best berry grown. I subjoin a statement made by G. D. SOUTHWORTH, of Penfield, who took the first premium from the "Genesee Valley Horticultural Society" this season. His soil is a light sandy one, which he says he prefers for *one particular reason*, that the frost does not throw them out of the ground in early spring, causing destruction to the roots. He plants them in rows.

As this is his first experience, he is to discard the Alpine variety, which has grown well, but is not fit for market. He proposes planting out half an acre of "Burr's New Pine" more than he now has, and ultimately as many as he can attend to.

To use his own words, he says the "*Burr's New Pine*" will produce double the quantity that the "*Hovey's Seedling*" will, carries to market well, and is all that could be desired.* He places straw under the vines, and when his fruit is brought to market, it is as clean and bright as though varnished.

His success has been complete—price sold for, from 25 cents per quart, down to 12½ cents, averaging for his crop, 13 cents. J. H. WATTS. *Rochester, July* 16, 1852.

Geo. D. Southworth's statement.—I have about five-eights of an acre planted to strawberries. The varieties are—Early Scarlet, about three-eights of an acre; Hovey's Seedling and Burr's New Pine, about one rod each; Alpine the remainder.

I have sold a little over 2,000 quarts, at an average of 13 cents a quart. $265. G. D. SOUTHWORTH. *Penfield, N. Y., July* 15, 1852.

DR. VALK'S SEEDLING GRAPE.—The August number of the Horticulturist, contains a "reply" to what is termed my "strictures." On what? Very much to my surprise, and certainly to my regret, the few remarks made by me in the June number, in relation to my Seedling Grape, and Mr. CHORLTON's comments thereon, appear to have given that gentleman a deal of offence. "A corner in your valuable journal is requested to answer my *caustic* remarks," and if I am to judge the measure of their causticity by the pungency of the "reply," they must have been pretty highly seasoned with "invective, braggadocio, and sarcastic pique against a trifling misplaced etiquette."

Now all this puts me in mind of an old saying, that a tempest is easily raised in a teapot. Referring to pages 290 and 291 of Hort. for June, your readers will please note the article that has proved so exciting to Mr. CHORLTON. I had communicated to the late deeply lamented editor, the fact of my having raised several seedling grapes, a cross between the Black

* Burr's *New* Pine is an American Strawberry of first rate character—our correspondent does not overrate it. Very fine, very productive, very *early*. ED.

Hamburgh and the Isabella, and had sent him a bunch of the fruit. His judgment was flattering, and I think would have been more so, if I had been able to send him a perfect bunch.

Mr. CHORLTON notices my communication in the Hort. for November, and thought that "too much praise" could not be given to me for my "enterprising experiment," but he thought I had "gone the wrong way to work." My reply was, that "physiological theory teaches" *well*, but practical experience better,—the *proof* of hardiness in my grape being the past severe winter. I spoke of my seedlings as I thought they deserved, although I had "gone the wrong way to work." Without a thought of, or reference to Mr. CHORLTON, I felt the necessity of stating my abhorrence of humbugs and cheats, and left "my grape to the ordeal of its own merits, and the test of time." In all this, where are the "caustic remarks," the "invective, braggadocio, and sarcastic pique" with which I am charged? It is a libel on the truth to say so, and still a greater libel to misunderstand and then misrepresent what I have said. It is a perfect piece of folly to write about "good feeling," when "comments" are made of a character directly contradictory of the assertion. *Where*, in my "estimation," do I assert, that "acting in accordance with the inscrutable and immutable laws of the all wise designer of the universe," would be "catering *a la Barnum?*" It is something worse than a "delusion" to insinuate the charge; it is a positive untruth to assert it. No man more thoroughly detests the "follies and cheats" of horticulture than I do, and it was because of this, that I desired to "establish the reputation of my grape on some better evidence than the usual form of horticultural charlatanry." I wished to put my grape to the proof, and *when proved*, then to claim my just due for doing something to improve a valuable and delicious fruit. Those "who know" are welcome to indulge in the largest scepticism "upon the experiment." It is an indulgence that will injure no one, but when it comes to "comment" and misrepresentations, the pure offspring of a perverse imagination, I object decidedly, and would remind the gentleman to whom I am alluding, that bearing false witness against his neighbor, is in violation of a command of the decalogue.

It has been hitherto thought a "desideratum" to procure a native grape as *hardy* as the Isabella, yet bearing fruit equal to the foreign varieties. But this is *not* the desideratum after all. It is a very desirable point to be sure, yet it is a "*trifling* matter" compared with the "constitutional power to resist mildew during the growing season." So says Mr. CHORLTON, therefore *the* desideratum is, *a constitutional power to resist mildew during the growing season*. The foreign grapevine is *hardy* enough, and stands unprotected without injury in situations north of this, (Staten Island,) but we want the constitutional power, &c., and must get it as soon as we can.

My *assertions*, whether few or many, have amounted to the declaration of the fact, that my vines are as hardy as the Isabella, and, that I hold them to be superior to every other grape grown in the *open air* in any part of the United States. I shall endeavor to *prove* my assertions by the test of time, and shall cheerfully await the verdict.

Having no vines to *sell*, and not intending to dispose of a single plant until that verdict is rendered, I can excuse the doubts, surmises, and scepticism of Mr. CHORLTON, "and those who know." To the just and impartial reader, I leave the decision of the question—is my communication of May 5th, in June Hort., or Mr. CHORLTON's of July 15th, in August Hort., the most open to censure, for their "caustic remarks," and "sarcastic pique." "Jeffreys" has got *something* to say, and I am anxious to hear him say it. W. W. VALK, M. D. *Flushing, L. I., Aug.* 10, 1852.

COLD WATER IN WELLS DURING SUMMER.—In the March number of the Cultivator for 1851, (page 117,) I described the well from which we draw our daily supplies of water. It is protected by trees and buildings so that the sun never shines into it; but the snow enters, and during all the spring, and early part of summer, it is so uncommonly cold as to have been mistaken by a guest, for ice-water. Gradually however, it grows warmer as the heat of the season increases, and as the springs that feed it, mingle with its chilled waters; but we have

often thought how desirable it would be if its coldness could continue throughout the summer and autumn.

Well, we have lately found the remedy for this defect. Judge R —— dining with us on the 3d of last month, brought in his carriage a large lump of ice, intended for other purposes but which we plunged into the well. For about two days, the water was gradually growing colder, and then it was all *iced water*, delightfully cold, and far more pleasant, in my estimation, than any water from a pitcher of ice. It continued so about a fortnight. If no rains had swelled the springs that flow into the well, this temperature would have continued longer.

Ten or twelve pounds of ice every fortnight would not be deemed a high tax; and may be compared with the expense of a quid, a puff of smoke, or a pinch of snuff *ad libitum*. D. T.

Lilium lancifolium.–This is the season when these superb flowers are blooming. Let us counsel all who have either of the varieties, to save seed, and to hybridise them with some of our native species. Some growers have done this, but we are not aware that any great result has hitherto arisen. It is perhaps rather soon to expect it, for it takes three years at least to flower a seedling from the time of sowing; and therefore much may be in store for us yet, of those now in process of growth; and besides, judging by analogy from the hybrids of other flowers, we must not expect to get distinct and fine new sorts without continued application. No trouble however, or time either, can be thrown away in this matter, for if strikingly new varieties are not produced, all the seedlings will be beautiful; and it will be a long time yet before the stock of these splendid ornaments of our green-houses and gardens at all approaches what we should like to see. There is a fine lot of these seedlings coming into bloom at Mr. Boll's nursery, at New-York. We heartily wish him success. We do not generally see these Lilies grown so well as they ought to be. We have grown L. lancifolium punctatum, ten feet high, with from 10 to 16 flowers as well as the stem and leaves of a size proportionately large to that height. This variety is always both earlier and taller than Rubrum, or Album, and when duly encouraged in its growth forms a much more majestic plant; although in beauty it must yield to the first of them. Black peat earth is by no means essential to this plant, as many suppose; good loam, well enriched, it delights in.

The Microphylla Rose.—The Microphylla Rose, according to Loudon, was introduced into Britain, from the East Indies, in 1823. Its *specific character* is, "Leaflets, finely serrate, shining. Calyx muricated with very dense prickles. Sepals, short, broad, acute, apiculate." In 1829, he mentioned no *variety* of this *species;* but I have seen the names of *nine* in a recent catalogue. I have only the *white*, and the *red*,—the latter agreeing best with the specific character, and would do so entirely were its leaves "shining" when dry. The white variety, I think must be a hybrid, as its leaves are larger, its calyx less muricated, and its sepals longer and more slender.

The red sort is a beauty, perfectly double, and blooms throughout the growing season, though it is rare to find more than two or three roses open on the same bush at one time. The flower bud resembles a bur, and hence it has been called the *Bur Rose*.

Both varieties, however, are very desirable, though they are unable to withstand our rigorous winters; and as the flowering twigs stand on the stems of last year's growth, it is necessary to bend them down and cover them on the approach of severe weather.

The Champney, Feilenberg, Chromatella, and other tender sorts, when the stems are killed by the cold, send up radical shoots which bloom earlier or later in summer, and thus assume the habits of herbaceous perennials. D. T.

Money found in Peat Earth.—A gentleman was not long since breaking up some peat earth, which he had procured for gardening purposes at Wimbledon, a few miles from London, when his spade struck against a hard substance, which turned out to be a silver half crown piece of King Charles the first. It was about three inches deep in the turf, and assists in forming some estimate of the time which elapses in the reduction of vegetable matter to the state which we term peat. For the coin was so firmly fixed, and the surrounding vegetable matter was so perfectly even in texture both above and below it, that no reasonable doubt

can exist that the depth of soil above it had been gradually formed over it, after it had been dropped there, probably by some Cavalier or Roundhead of the day. At all events the coin could not have been deposited there before the time of Charles, and the impression bore but little signs of wear from use; the inference to be drawn is that it had in all probably laid there from that age.

HORSE SHOE IN A TREE.—Whilst cutting a piece of oak a few weeks ago, in the timber yard of Mr. Thos. Wallis, at South Shields, England, some workmen found a horse shoe embedded in the heart of the wood. From the thickness of the wood that had grown over it, it must have been fixed to the tree when very young.

DAPHNE INDICA RUBRA.—Mr. Editor: I should like to see the *true* variety of this delightful plant more amongst us in this country. I was for several years engaged in business in England, where I got bit by the "Floriculturaphobia," which, as you know, is a prevalent complaint in that part of the world. But, upon returning home, and stocking my little greenhouse, I hunted through many nurseries here before I could get the right kind. All the nurserymen have what they call the Indica rubra, but it is not true; nor is it in leaf or flower, anything equal to the correct one. At last I met with it true, at BUIST'S, at Philadelphia. The flowers are finer, and more abundant, and the leaves at the point, lancet shape, and thick in substance, in the correct plant. In England I found it difficult to keep in health, until I was let into the secret by one of the two men who introduced it into that country; since that, I have had no trouble, and I think no plant equals it in the early spring. Yours, AMERICUS.

[Will our correspondent oblige us by sending his experiences of this flower? We agree in his admiration of it, and are sure his remarks on its cultivation would be very acceptable to many of our readers. ED.]

A NOTE FROM A FARMER'S WIFE.—MR. DOWNING: What think you has become of the New England country girl, who used to contribute to your pages, over the name of "Wild Flower?" I suppose she is married, as few who are belles are apt to remain long in a state of "single blessedness." She says on page 546, vol. 4th, that she is tired of hearing about "remarkable pears," and that she could not "graft a tree for her life." If she was tired of hearing of new pears in 1850, what must be the matter now, since more has been said within the last two years on the subject of fruit, than had been in ten years previous. I am no more tired of hearing about remarkable pears, than I am of eating them, and they taste so much better when you can say, "they grew on my own trees," and as for grafting, I can do that to a charm, and have done it, on seedlings of my own raising. Having been rather unfortunate at first in raising pear seedlings, I raise them on a new plan now, which makes their roots fibrous. If my trees could talk, they would report themselves by hundreds, that I have raised, grafted or budded, and helped to transplant within the last 12 years. (I hope the nurserymen won't be alarmed; there is no danger of my example being followed by the ladies sufficiently to interfere seriously with their business.) My father is a farmer, and in the days of my youth kept a small nursery himself. I used to work with him in the nursery, tying buds and the like, for many a day. This I suppose accounts for my passion for trees ever since. My love of flowers increases with years. What I know of botany is self acquired; but I have learned enough for all useful purposes. My love for wild flowers leads me over hills and dales, in search of floral treasures, to decorate my garden, and I have a large collection of native flowers that I have removed from their native haunts. I find the natives of upland to be the most patient of removal, and there is certainly nothing more delightful to me than an intelligent ramble in the woods with the double pleasure of botanical and gardening acquisition to lead me on I always find something new in flower, even where I have wandered many times.

I do not exactly like the spirit in which "Wild Flower," speaks of the farmers' "rye bread," as if it was a matter of course that the farmer must eat rye bread. It is the farmers who raise the wheat on their own land, and "lords of the soil" are not likely to give the fat of the land wholly to others; and farmer's wives are apt to know how to make wheat bread (that is to say if they were prudent in

the choice of a wife, and married farmer's daughters.)

In your remarks on the article I have referred to, you speak of the constant turning of eyes to the cities for fashions and customs; if that was all I should not so deeply regret it; but there is not a season passes but some relative or neighbor is selling or leasing his farm, and going to some village or city to live, and as far my observation extends, it is generally chargeable to the gentlemen. I fear my husband may take the disease, which appears to be contagious, but here there would be an obstacle in the way.

I entirely agree with Wild Flower's notions that the killing of all birds should be made a crime, with attendant penalties, but I fear that legislatures would be inefficient to the task. It would be a more effectual stop if the mark of odium could be put upon the hunter [except in wild countries] by common consent, as it should upon the tobacco user in any form. Then, and not until then, will the thing be accomplished, but as long as young ladies will countenance the use of tobacco in any form by young men, just so long will they use it. A Farmer's Wife.

As a farmer's wife has not sent us her address, we have no other way than this of expressing our thanks and acceptance of her kind offer, which accompanied the foregoing. Ed.

The Osage Orange.—I know of no plant so likely to prove valuable for hedges as the Osage Orange. I have cultivated it many years; and even in this climate it is quite hardy enough for that purpose. It is true that very thrifty shoots often have their tops killed down for a foot or more in severe winters, but such branches as have ceased to grow in good season, and have had time to mature their wood, sustain no injury. And in a hedge properly trimmed, the twigs are greatly multiplied, and there are no leading shoots to be injured or killed.

The thorn forms a nursery for insects, and often perishes in consequence; but I know of none that feeds on the Osage Orange. I consider it also more formidable than the thorn; and whoever encounters it, unprotected against its spines, will be likely to remember that time.

I have a hedge-row, rather than hedge, through which none who regard a sound skin, would dare to creep. D. T.

The Black Ant.—These marauders are often extremely troublesome in gardens where they make their nests; and from thence prowl into the larder or the fruit garden, even at considerable distances from their home. Last year, in the Cultivator, I mentioned having carried off a large detachment in a basket of apples; and I have just been reminded of it by the girl bringing me a tin can of sugar into which the ants had found their way. Taking them to a broad smooth stone, I let them out, in such numbers as I could manage, and soon destroyed about two hundred and fifty. That happened yesterday; and this morning a similar scene occurred, though only about 100 were now killed, indicating that their family was much reduced. D. T.

The Astrachan Apple.—Every householder who owns land—if only a small lot—ought to have one tree of the Astrachan apple, both on account of its earliness, and its excellence for cooking. It is so *tender* as to be cooked almost as soon as it is scalded; and so *pure* that it has no unpleasant tang, like the Yellow Harvest. It is acid indeed, but sugar readily overpowers this defect.

It is a tree of vigorous growth, an abundant bearer, and what is worthy of note, it bears every year without fail. Twenty feet from where I now sit, stands a tree of this variety, with branches bending under their load; and a very frequent dropping takes places. When half grown, these apples may be used; but like most other fruits, the flavor increases with the magnitude. A well grown tree would furnish a common sized family for some four or five weeks, though I cannot determine this period exactly.

The fruit is of great beauty, having a *bloom* like the plum, on a fine red skin. I know of no apple at this season that would command more customers in market. D. T.

Duration of Timber.—Much has been said and writen upon the age of trees, both living and after they have been reduced to the use of man. That under favorable conditions the vegetable fibre is well calculated to resist the ruthless ravages of time, many well authenticated evidences have been accumulated to show. The roof of Westminster Hall in London, which has of late years given rise to repeated disputations

as to whether it be of oak or chestnut, was without doubt, erected a thousand years ago, and continues perfectly sound; and there are other edifices in the old world which contain equally old timber in perfect preservation. But there has lately been imported into England, some specimens of ancient timber, which by contrast take away the dignity of age from the European ancients. During the excavations which have been so perseveringly prosecuted under the direction of Dr. LAYARD at Ninevah, some timbers of considerable size, of the wood of the Mulberry, have recently been discovered, which are said to be as solid and firm as they were when placed in the position from which they are now withdrawn. But when were these venerable ancients submitted to the axe? At least seven or eight hundred years before the christian æra; and they are now some twenty five or six centuries old! We are not aware that any specimens of old timber can at all bear comparison to these, for in none of the ruins of Egypt or of India, that the researches of the many indefatigable travellers of the last hundred years has produced, was there found any wood work that, from its position and appearances, indicated an age coeval with the structures themselves

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THE CURCULIO OR PLUM WEEVIL.—Much has been written about this destructive insect, and many plans have been adopted to prevent its ravages on the Plum, and other smooth skinned fruits. Some prefer paving under the trees; others planting in hog or poultry yards; many use salt, ashes or sulphur, scattered over the ground around the trees.

The first method has been adopted by Mr. LONGWORTH, and others, in *Cincinnati*, with eminent success, but in the country it is not found so effectual. The other modes, so far as my observation and inquiries extend, have not been successful.

The plan I pursue is a very simple one; *Destruction*—shaking off the insects from the trees on sheets, in the morning and evening, and *killing them*. This method was proposed many years ago, by DAVID THOMAS, one of the best *practical* horticulturists in Western New-York, and has been adopted by me from the recommendation of my friend Doct. MOSHER, for the past eleven years. Since that period, I have saved my plums seven years out of the eleven; the frost destroyed them in blossom four years.

I have never failed to secure at least half a crop, on an average, and on some of the trees more than they should have been allowed to bear. To make this plan effective, the plum trees should be planted by themselves, near the house or barn, and if in a paved, or hard smooth yard, so much the better; if in grass, keep it mowed down close; gather up the injured fruit as it falls, and throw it to the pigs. When the trees are young, a sudden blow with the hand will bring down the insects; when old, saw off a lower branch, leaving a stump of 3 or 4 inches, to be struck with a mallet, for the same purpose.

It may be objected that the crop is scarcely worth this trouble, but it requires less time than would be supposed by those who have not tried it; a few minutes in the morning and evening will be sufficient to protect a dozen or two of trees. I have now 36 in bearing, and I find the trouble less than I anticipated. Those the frost spared this spring are now loaded with fruit.

The curculio commences its ravages when the plum is first formed, and continues until the latter end of July. During all that period, in fair weather, they should be shook off early in the evening and destroyed. Perhaps early in the morning alone might answer. The insect flies most at night.

This "shaking system" as it is termed, has been sneered at by some who have felt disposed to be witty on the subject, but I must confess I cannot find a more *practical* remedy. We destroy caterpillars and many other insects found depredating on our fruit trees, and why not the curculio? To be sure it requires *labor*, and so does everything else about the orchard, if you want healthy fruit trees and good crops. For my own part, as an amateur cultivator, the care of fruit trees has always been to me a delightful hobby.

To watch their growth from year to year—to cultivate, prune, and train them—to observe the effects of experimental treatment in culture, in grafting and budding—to gather and test the first fruits of new or famous varieties—and to be enabled to present to friends, splendid specimens of the finest fruits in their seasons, are pleasures that richly repay the toil of the *amateur*, to say nothing of the health

and cheerfulness, obtained by such innocent relaxations from the cares and anxieties of ordinary business pursuits.

Those who cultivate the plum for market, might possibly find the destruction of the curculio by this method, too expensive where labor is high; this, however, will depend on the value of the fruit where sold. R. BUCHANAN. *Cincinnati, Ohio, Aug.* 13, 1852.

RIVAL HUDSON STRAWBERRY.—This new variety is gaining a high reputation for its productiveness and general value, although not of the highest quality for the table. It is one of the best late sorts, and is fine for the market or for preserving. A correspondent of Moore's New-Yorker, says that a single neglected plant of last year's growth, accidentally over-looked till full of ripe fruit, was found completely surrounded with trusses of berries, on which one hundred and thirty-three ripes ones were found, proceeding from this single root.

EXTENSION OF TREE ROOTS.—We have often had occasion to point out the uselessness of digging small circles of the ground about large fruit trees standing in grass. The Mass. Ploughman says, "Last week we plowed a few furrows in the road-side under apple trees that had been set but five years, and we found roots in plenty, at a distance of ten feet from the trunks of the trees."

Answers to Correspondents.

PEARS AND CHERRIES.—*A. J. R.* The two best varieties of Pears on Quince for market, which you name, are Louise Bonne de Jersey, and Vicar of Winkfield. Of the sorts on pear roots, we should select Lawrence and Bartlett. For the best three cherries for market we should select Mayduke, Napoleon Bigarreau and Downer's Late Red or Black Tartarian.

SULPHATE OF AMMONIA.—*G. M. H.* informs us that he was unable to obtain this article at the drug shops in Boston. It can be had of WALTER B. SNOW, 23 Market-street, Providence, R I., who states that he has sold it to many in that vicinity, who have been much pleased with its operation. Price 25 cts. per lb.

CHINESE WISTARIA.—*S. E. J.* As you say your plant has been in a sunny exposure, it has probably been too dry at the roots. You had better take it up with care as soon as the leaves fall, replant it in good soil, and when it starts next year, keep it moderately moist.

VINE BORDERS.—*S. R.* You should drain your vine border thoroughly; the state of it, according to your description, is quite enough to account for your grapes never ripening. In opening your border, cut of all roots you find which have got down into the heavy soil at the bottom.

GERANIUMS.—*Jane.* There are three or four new varieties of the Scarlet Geranium, far surpassing the old sorts. We saw this year two at THORBURN's at Astoria, named Cerise Unique, and Princess Alice, which you will find well worth attention.—*E. S.* Some of the best Geraniums at moderate prices, are Hoyer's Crusader, Beck's Star, Beck's Rosy Circle, Lyne's Forget-me-not, Lady Clementina, Beck's Rosamond, and Topping's Rebecca.

SEA KALE.—*T. M.* This is a most excellent vegetable, and well deserves more general cultivation. We will give an article on its cultivation in an early number.

GOOSEBERRIES.—*T. S.* The opinions as to mildew among Gooseberries, are various. We have seen them grown successfully, and almost as good as we ever saw them in England, upon the north side of a border, in a garden near New-York, having an open lath fence behind it, against which they were trained. These trees never suffered from mildew, although some in an adjoining garden, planted against a similar fence, but exposed to a western aspect, were covered with it, and the fruit not larger than a fox grape.

S. M.—The Chinese Primrose, or Primula Sinensis, is one of the prettiest things you can get, to enliven your green-house in the fall and winter months. It is cheap, and to be got of any gardener; and the effect produced by half a dozen of them, placed amongst other plants, is magical.

Amateur.—Single Hyacinths are, in the opinion of many, equal in beauty to the double; L'Ami de Cœur, Nimrod, Grand Vainqueur, Paix d'Amiens, are some of the best, and cheapest also.

T. Edwards.—Cytisus racemosus is a more desirable green-house plant than C. rhodophne. There are two varieties of the racemosus; in one the flowers stand up erect, in the other they droop. Get the former of the two. If potted in rich compost, it will grow rapidly, but it

should be repeatedly stopped to make it bushy.

C. Janes.—The best Epacris for winter bloom are Nivalis, Impressa variabilis, and Campanulata alba. E. grandiflora, when well grown, is one of the most splendid green-house plants, but it does not bloom freely, as early as the others.

B. Smith.—The finest of all the Andromeda family, is A. floribunda; but we have never seen it, and we do not think it is yet introduced amongst us. The shrub is most beautiful, and the bloom like bunches of Lilies of the Valley.

Notices of Societies.

The Pennsylvania Horticultural Society will hold its 24th grand Autumnal Exhibition on the 15th, 16th, and 17th September, in the Philadelphia Museum buildings.

The American Pomological Congress will convene in the Museum Building, Ninth-street, below Chestnut, Philadelphia, on the 13th day of September.

The New-York Hort. Society will hold its Autumn Exhibition at Metropolitan Hall, Sept. 21, 22, 23.

The Champlain Valley Hort. Society's Fall Show, will be held at Plattsburgh, Sept. 29.

Pennsylvania Hort. Society.

The stated meeting of this Society was held in the Chinese Saloon, on Tuesday evening, August 17th. Dr. W. D. Brickle, V. P., in the chair.

There has not been at any former meeting for this month, so fine a display of fruits as on this occasion; the competition was unusually spirited, and the committee for awarding premiums seldom have had their powers of discrimination so thoroughly tested. In Grapes there were some ten contributors, who presented such specimens as have rarely graced the tables of the Society. The Black Hamburgh variety was in the greatest profusion, and the White Nice most beautiful. Of Nectarines, the Red Roman, Elruge, New White and Newington varieties were shown. The dishes of Plums were very numerous, and of many varieties; among them were the Reine Claude, Flushing Gage, Magnumbonum, Gwalsh, Washington, Mirabelle, Mammoth, Bingham, and other kinds. The table of Pears was a beautiful sight; the specimens were perfect and in great variety. The apples in most instances remarkably fine, and of many kinds.

This exhibition denotes a most fruitful season, and is the harbinger of a rich display next month, at the American Pomological Congress, and the grand Autumnal of the Society, both of which will occur during the week commencing with the 12th.

The collection of plants shown were very interesting.

Peter McKenzies, contained very many choice Fuchsas, Gloxinias, Geraniums, Verbenas, etc.

Caleb Cope's had several recently introduced plants, and were shown for the first time—Oldenlandia Deppei, Franciscea Villosa, Gloxinia Madame de Sombriel and G. Napoleon, and beautiful specimens of Russelli Juncea, Achimenes Venusta and grandiflora. Also a cut flower of the Victoria Regia, the 8th from the same plant, and seen for the first in its second stage of growth, and a design among the flowers ornamenting the same were 3 specimens of the Cereus glaucus, (sete,) and beautiful baskets of exotic and indigenous flowers. In John Lambert's collection were fine plants of Pentas carnea, Roses, Hydrangeas, Acacias, etc.

Mr. Buist exhibited a beautiful cut flower of the Victoria, grown in a tank at his premises, Rosedale, Kingsessing, expressly erected for the purpose; the seed came from Mr. Cope's plant.

The Boquet designs, and Baskets, were very handsome and creditable. The vegetable tables groaned with their great weight, which contained specimens of the finest growth, exhibiting skill in the cultivators. A new variety of salad attracted attention from its speckled appearance, called the Speckled Salad of Austria—"*Forelle Kopf Salat*," raised in the open ground, from seed brought from Vienna, by Dr. J. Rhea Barton.

The Fruit Committee submitted a very interesting *ad interim* report of objects shown to them since the last stated meeting.

Oswego Hort. Society.

The Summer Exhibition of this society was held at the City Hall, July 13, 1852. Hon. E. B. Talcott, President, in the Chair.

The display of flowers exceeded any previous exhibition in variety and quality, although somewhat less in number. Notwithstanding the lateness of the season, the ladies succeeded in presenting a profusion of roses, in collections of 20 to 30 varieties, with marked taste in the arrangement. Messrs. Thorp & Co., of Syracuse, exhibited 70 varieties. Accompanying these were specimens of evergreens, some of them quite new and rare.

The season has been very unfavorable for fruit. Cherries have suffered from Curculio, drouth, &c. The show of Strawberries, and other small fruits, was very limited.

List of Cherries exhibited.—Black Tartarian, Blackheart, Napoleon Bigarreau, Late Mayduke, Downer's Late Red, Florence, Graffion, American Heart, Downton, Honey, Redheart, Black Bigarreau, Sparkawk's Honey, Black Eagle, Kentish. A dish of the Florence from the garden of the Hon. A. P. Grant, deserves special notice, for the beauty, large size, and delicious flavor of the fruit. Black Tartarian and Napoleon Bigarreau, presented by Mrs. L. B. Crocker, were equal to the finest on the table. Mrs. C.'s garden, cultivated with taste and attention, always furnishes its rare and beautiful products at our exhibitions. The former variety, shown by Wm. Worden, (nurseryman,) Messrs. Fort, Carrington, the President, and others, was in great perfection. Mr. A C. Mattoon exhibited a large and excellent collection from trees newly planted.

The Black Tartarian received the premium of course; it is difficult to find a variety that will successfully compete with it.

Of Strawberries—Hovey's Seedling, White Alpine and a few others were shown, the former taking the premium.

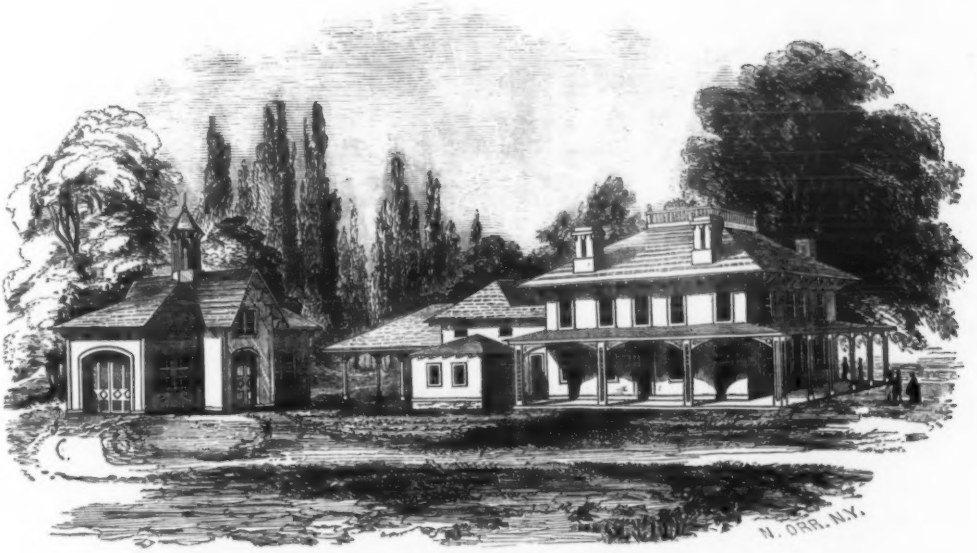
Some four or five kinds of Russet Apples were presented by Hon. J. Turrill, and J. W. Judson, Esq., in sound condition, and of good flavor.

The only Pears at maturity were the Amire Joannet, by Mr Worden. Thomas, in his Fruit Culturist, says of it very truly, "the earliest pear known—which comprises its merit." A branch of the Beurre d'Anjou, from a tree two years old, literally loaded with fruit, exhibited by Mr. Fahnestock, of Syracuse, attests the early productiveness of that sort.

The next exhibition of this Society will be held on the 14th of Sept. next.

We trust the Horticultural Societies in the Union will not neglect some suitable testimonial to the memory of Mr. Downing, whose untimely end we have so suddenly been called to deplore. Here, where his teachings and experience in the department of Art to which he devoted himself, have conduced so much to rational enjoyment, his loss is deeply felt. There is a feeling of grief and sorrow, that a mind from which emanated so much that was really useful and beautiful, is gone from among us.

Yours, &c. J. M. Casey, Sec'y.



Southern or Plantation House.

Hort: Oct., 1852.